DOCUMENT RESUME

ED 264 787 HE 018 968

TITLE Higher Education Expansion in Asia. Reports from the 1985 International Seminar on Asian Higher Education (Hiroshima, Japan, January 28-31, 1985).

INSTITUTION Hiroshima Univ. (Japan). Research Inst. for Higher Education.

PUB DATE Sep 85

NOTE 180p.

AVAILABLE FROM Hiroshima University, Research Institute for Higher Education, Higashi Senda-Machi, 1-1-89, Naka-ku, Hiroshima, Japan 730.

PUB TYPE Collected Works - Conference Proceedings (021) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC08 Plus Postage.

DESCRIPTORS Access to Education; *College Role; Degrees (Academic); *Developing Nations; *Educational Development; Educational Finance; Educational Policy; Educational Quality; Education Work Relationship; Enrollment Trends; *Foreign Countries; Foreign Students; *Higher Education; International Educational Exchange; International Organizations; Labor Market; Private Colleges; Trend Analysis

IDENTIFIERS *Asia; China; Indonesia; Japan; Korea; Malaysia; *Pacific Region; Philippines; Public Colleges; Thailand; UNESCO

ABSTRACT

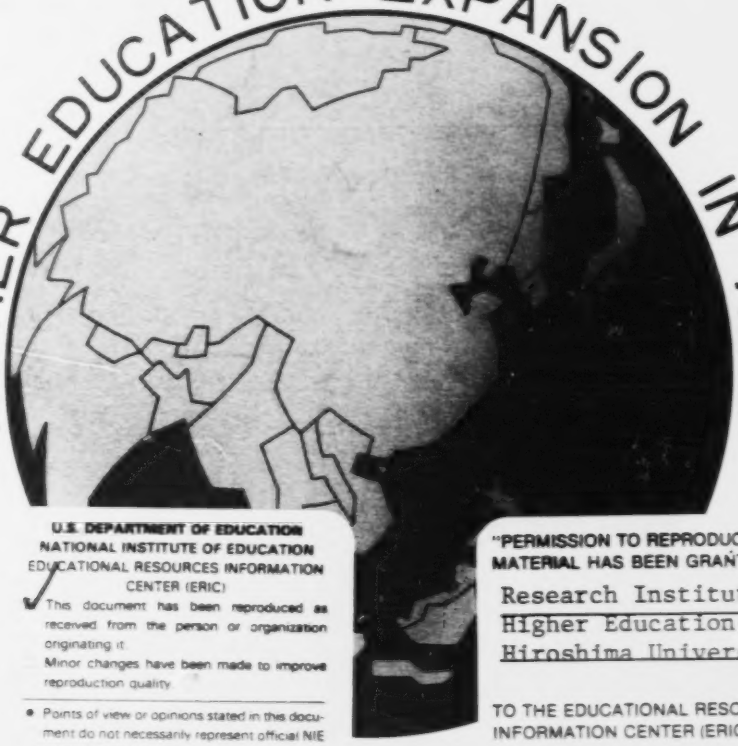
Expansion of the past 10 years in Asian higher education and associated problems, as well as the role of colleges and universities in national development, are discussed in 11 papers from a 1985 International Seminar. Paper titles and authors include: "Prospects and Problems in Asian Higher Education: Introductory Presentation by the Secretariat" (Toru Umakoshi, Hirotoshi Yamasaki, Joe Hicks); "Higher Education Development in Indonesia" (Ir. S. Pramoetadi); "Prospects and Problems in Higher Education Expansion: Malaysia" (Azman Wan Chik); "Prospects and Problems in Higher Education Expansion in Thailand" (Prasarn Malakul; comments by Yoshiya Abe); "Prospects and Problems in Japanese Higher Education: An Age of Adaptation sans Expansion" (Masakazu Yano, Fumihiro Maruyama); "Higher Education Expansion in the Philippines: Problems and Prospects" (Benwardo V. Umila); "Higher Education Expansion in Korea: Its Process, Problems and Prospects" (Byung-Rim Koo, Jong-Chol Kim); "Development and Reform of Chinese Higher Education" (Wang Yingjie); "Why Asian Overseas Students Prefer the United States" (William K. Cummings); "The Situation of Asian Students in Japan: Can Japanese Universities Handle a 10-Fold Increase?" (Joe Hicks); and "UNESCO and Higher Education in the Asia-Pacific Region" (Muhammed Selim). (SW)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

Reports from the 1985 International Seminar on Asian Higher Education

ED264787

HIGHER EDUCATION EXPANSION IN ASIA



U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

✓ This document has been reproduced as received from the person or organization originating it.
Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Research Institute for Higher Education, Hiroshima University
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

HE018968

1985

Research Institute for Higher Education
HIROSHIMA UNIVERSITY

Higher Education Expansion in Asia

Edited and Published by:
Research Institute for Higher Education
Hiroshima University
Higashi Senda-Machi
1-1-89, Naka-ku,
Hiroshima JAPAN 730
Telephone: 082-243-7193
Printed by:
Nishiki Printing Co., Ltd.
5-33 Shoko-center, Nishi-ku,
Hiroshima 733, Japan

September 1985

Preface

When we consider the great role the university plays in the development of nations and when we see the tremendous expansion of the past 10 years in Asian higher education and some of the resulting problems of this expansion, the necessity for a seminar of this nature—one to make a beginning step towards examining the process of this expansion, the problems incurred by rapid and often uncontrolled expansion and the future prospects for Asian universities—seems great indeed.

We at the R.I.H.E. were very pleased to be able to invite such a notable group of scholars representing China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand, the United States and UNESCO to join with us in discussing these vital problems. Through this seminar we were able to get a much clearer picture of Asian higher education expansion and its problems and to make invaluable contacts for future research and cooperation.

This seminar was held within the framework of the UNESCO Regional Cooperative Program in higher education. Since 1984 the R.I.H.E. has launched a research project entitled "A Comparative Study of Higher Education Structure and its Functions in Asia and the Pacific" as an initial project in cooperation with the UNESCO Program-Consortium C.

We would like to express our sincere gratitude to the authors of all of the papers appearing in this volume and to the former Director of the R.I.H.E., Dr. Michiya Shimbori who hosted the seminar. We also acknowledge support from Dr. Muhammed Selim of the UNESCO regional office in Bangkok. Finally, special thanks must be given to the Japanese Ministry of Education, Science and Culture for their substantial financial assistance and kind cooperation in all phases of this seminar.

Hiroyuki Hata, Director R.I.H.E.

HIGHER EDUCATION EXPANSION IN ASIA

CONTENTS

PREFACE i

PROGRAM OF THE SEMINAR v

LIST OF PARTICIPANTS viii

PAPER PRESENTATIONS

Prospects and Problems in Asian Higher Education
— Introductory Presentation by the Secretariat —
T. Umakoshi, H. Yamasaki, J. Hicks 1

Higher Education Development in Indonesia
Ir. S. Pramoetadi 13
Comments by W.K. Cummings 36

Prospects and Problems in Higher Education Expansion: Malaysia
Azman Wan Chik 39
Comments by Y. Gondoh 50

Prospects and Problems in Higher Education Expansion in Thailand
Prasarn Malakul 52
Comments by Y. Abe 66

Prospects and Problems in Japanese Higher Education
— An Age of Adaptation sans Expansion —
M. Yano, F. Maruyama 68
Comments by J. Kim 85

Higher Education Expansion in the Philippines: Problems and Prospects
B.V. Umila 87
Comments by Y. Hara 94

Higher Education Expansion in Korea: Its Process, Problems and Prospects
B.Y. Koo, J.C. Kim 96
Comments by T. Umakoshi 106

Development and Reform of Chinese Higher Education
W. Yingjie 108
Comments by Y. Otsuka 115

Why Asian Overseas Students Prefer the United States
W.K. Cummings 118
Comments by J. Hicks 139

The Situation of Asian Foreign Students in Japan
— Can Japanese Universities Handle A 10-Fold Increase —
J. Hicks 141
Comments by H. Yamasaki 154

UNESCO and Higher Education in the Asia-Pacific Region
M. Selim 156

PROGRAM

Prospects and Problems in Higher Education Expansion:
Sharing Experiences in the Asian Context

International Seminar on Asian Higher Education
Hiroshima University
28th-31st January, 1985

28th January

Opening Session

9:00—10:00 Welcoming Address—Hiroshima University President M. Yorizane
Opening Remarks—RIHE Director: M. Shimbori
Introduction of Participants
Introductory Presentation by the Secretariat T. Umakoshi

(Tea)

1st Session—Chairperson: T. Kobayashi

10:15—11:15 Higher Education Development in Indonesia: Ir. S. Pramoetadi
Discussant: W.K.Cummings

11:20—12:20 Prospects and Problems in Higher Education Expansion: Malaysia: Azman Wan Chik
Discussant: Y. Gondo

(Lunch)

2nd Session—Chairperson: M. Selim

14:20—15:20 Presentation From Thailand: Prasarn Malakul
Discussant: Y. Abe

(Tea)

15:45—16:45 The Preference of Asian Overseas Students for the U.S.: W.K. Cummings
Discussant: J. Hicks

16:50—17:50 The Situation of Asian Foreign Students in Japan: J. Hicks
Discussant: H. Yamasaki

Reception (3rd Floor of the Hotel)
18:30 — 20:00

29th January

3rd Session—Chairperson: M. Shimbori

9:00—10:00 Prospects and Problems in Japanese Higher Education: M. Yano & F. Maruyama
Discussant: J.C. Kim

10:10—11:10 Higher Education Expansion in the Philippines; Problems and Prospects: B. Umila
Discussant: Y. Hara

(Tea)

11:30—12:30 Higher Education Expansion in Korea: B.R. Koo and J.C. Kim
Discussant: T. Umakoshi

(Lunch)

4th Session—Chairperson: Y. Abe

14:30—15:30 Development and Reform of Chinese Higher Education: Y.J. Wang
Discussant: Y. Otsuka

(Tea)

16:00—17:00 UNESCO and Asian Higher Education: M. Selim
Discussion and Summing Up: Y. Abe

Free

30th January	9:00—12:00	Visit to Attached Secondary School of Hiroshima University Meet at Hotel Lobby
	(Lunch)	
	14:00—17:00	Visit to New Campus of Hiroshima University and Sake Brewery at the Saijyo Area
	Free	
31st January	10:00—12:00	Informal Meeting at R.I.H.E. for Future Cooperation
	(Lunch)	
	14:00—18:00	Sightseeing Tour to the Peace Memorial Park and Miyajima Island
	Free	
1st February		Departure

SEMINAR PARTICIPANTS

I. International Participants: (Alphabetical Order of the Country)

Wang Ying-jie	China	Associate Director, Institute of Foreign Education Research, Beijing Normal University
Ir. S. Pramoetadi	Indonesia	Director, Directorate General of Higher Education, Indonesia
Koo Byung-rim	Korea	Senior Specialist, Korean Council for University Education
*Kim Jong-chol	Korea	Professor of Seoul National University
Azman Wan Chik	Malaysia	Acting Dean, Faculty of Education University of Malaya
Benwardo V. Umila	Philippines	Director, Office of Research & Development, College of Education, University of the Philippines
Prasarn Malakul	Thailand	Dean, Faculty of Education, Chulalongkorn University
William K. Cummings	U. S. A.	Senior Specialist, The East-West Center at Hawaii
Muhammad Selim	UNESCO	Specialist of Higher Education

*Joint guest participant

II. Japanese Participants:

Yoshiya ABE	Professor, National Institute of Multi-Media Education
Yoshio GONDO	Dean, Faculty of Education, Kyushu University
Yoshio HARA	Professor, Tokyo Institute of Technology
Tetsuya KOBAYASHI	Dean, Faculty of Education, Kyoto University
Yutaka OTSUKA	Researcher, National Institute for Educational Research
Tsutomu MIZOTA	Head, Regional Interchange Division, Japan Society for the Promotion of Science
Kenji HAYATA	Deputy Head, Division for Education and Cultural Exchange, Ministry of Education, Science and Culture

III. Participating R.I.H.E. Staff

Director

Michiya SHIMBORI	Professor, Sociology of Education

Professor:

Masao SEKI	Science and Technological Education

Associate Professors:

Toru UMAKOSHI	Asian Higher Education
Masakazu YANO	Economics of Higher Education

Research Associates:

Fumihiro MARUYAMA	Sociology of Higher Education
Hirotoshi YAMASAKI	Sociology of Science
Joe. E. HICKS	Psychology-Adjustment to Foreign Cultures

PROSPECTS AND PROBLEMS IN ASIAN HIGHER EDUCATION

— Introductory Presentation by the Secretariat —

Toru Umakoshi*, Hirotoshi Yamasaki** and Joe Hicks**

1. Background of the Seminar

This Seminar is organized within the framework of the UNESCO Regional Co-operative Programme in Higher Education (Bangkok) as an initial activity of the RIHE. Since 1981 this UNESCO Programme has been contributing to the formation of a network among member institutions through which three types of research are to be conducted by the corresponding consortia listed below:

Consortium (A) Innovation in Higher Education
Consortium (B) Policy, planning and management in higher education, and
Consortium (C) Special research studies in higher education for development

Last April (1984) a decision was made by the RIHE staff to join Consortium C. After a joint meeting of Consortia B and C at Bangkok (Feb. 28 — Mar. 5th 1983), Consortium C set down the following five project areas for study.

1) Higher education, human resources and development
2) Equity as it relates to quality in higher education
3) Faculty recruitment, development and mobility
4) Quality and efficiency in institutions of higher education
5) Women in higher education
6) Investment in and outcomes of higher education

In accordance with the above project areas, the RIHE decided to launch its own project entitled "A Comparative Study of Higher Education Structure and its Functions in Asia and the Pacific", focusing mainly on an analysis of post-WWII development in Japanese higher education. This project is being financed by the Japanese Ministry of Education, Science and Culture (Monbusho).

More specifically this project will deal with the possible implications of the Japanese educational experience on the development of Asian higher education. In

* Associate Professor, RIHE, Hiroshima University
** Research Associate, RIHE, Hiroshima University

the course of the seminar Dr. Yano and Dr. Maruyama will discuss a part of our preliminary research findings.

As I mentioned above, these RIHE research projects will be carried out in relation to the activities of Consortium C, co-ordinated by the lead institution—The University of the Philippines. Just recently (Oct. 15—19, 1984) a research design meeting was held at the University of the Philippines. Dr. Maruyama represented the RIHE at this meeting. In relation to the guidelines set at this meeting, the RIHE has initiated 2 seminars. One was a national seminar held last November(1984) on "Merits and Demerits of the Post-War University System in Japan" The other seminar is the one we are opening today.

II. Objectives of the Seminar

In the past decade, although most Western countries have experienced a decline in enrollment rate (mainly due to demographic trends and economic recession), most Asian nations have achieved some form of expansion in their systems of higher education. Japan is an exception in that it expanded greatly from the 60's to the mid 70's but the late 70's brought a period of slower growth.

However the form, effects and process of this expansion differ from country to country. Higher education has been considered as very important, in fact, crucial for national development. Expansion in most Asian countries has been quite dramatic, in part due to the fact that the original base was small.

The growth of higher education has unfortunately not proven to be a panacea for national development. Higher education systems have managed to produce a national elite for manning the higher posts in government and administration but in some countries an oversupply of graduates has become apparent. Curriculum and teaching methods have come under scrutiny and are being challenged to improve in order to meet societies' needs and student diversity. In addition to these problems, a substantial number of Asian countries face serious financial problems in maintaining and improving the quality of higher education.

Based on the present situation, the objectives of this seminar will be to:

(1) Clarify the forms, effect and process of higher education expansion
(2) Investigate problems and dilemmas in the expansion of higher education
(3) Examine perspectives for the future development of higher education in member countries.

III. Themes and Variations

1. The Structure of Expansion

In order to illustrate the main themes of this seminar, some background data on Asian higher education will be presented using UNESCO statistical data.

Asian higher education in the 1970's experienced a remarkable expansion. A general view of the scale of this expansion for the past 10 years can be seen in Table 1 and Figure 1.

Table 1. Total Enrolment Growth in Higher Education

(×1000)

Year	Japan	Korea	Philippine	Thailand	Malaysia	Indonesia	China
1960	714	99			8		
1965	1092	142			13		
1970	1819	201	652	55	14	248	
1975	2249	297	770	131	32	278	
1980	2412	615	1276	361	51('78)	481('81)	1161
1981				911			

(UNESCO:Statistical Year Book, 1983, 1972)

The latter half of the 1970's shows a particularly great expansion for Korea, the Philippines and Thailand. This spectacular expansion may be attributed to several factors such as demographic trends, i.e. total population growth, gradual increases in secondary enrollment and an improvement in national per. capita income.

Next I would like to discuss the structure of expansion. In Japan, Korea and Thailand more than 70 % of the total enrollment is at university or equivalent degree-granting institutions. Only in Malaysia which maintains a binary system of higher education, can we find more than half of the total enrollment belonging to non-university types of higher education institutions. Generally speaking this means that higher education expansion in Asian countries has mainly been achieved by the expansion of university and its equivalent institutions. (Fig. 2)

The other characteristic of expansion can be traced through the growth of private institutions especially in Japan, Korea and the Philippines. In these countries privately funded colleges and universities far outnumber national ones. More than 3/4ths of the total student population is enrolled at private institutions. The private sector in Thailand and Indonesia is increasing but it does not form the main pillar of higher education.

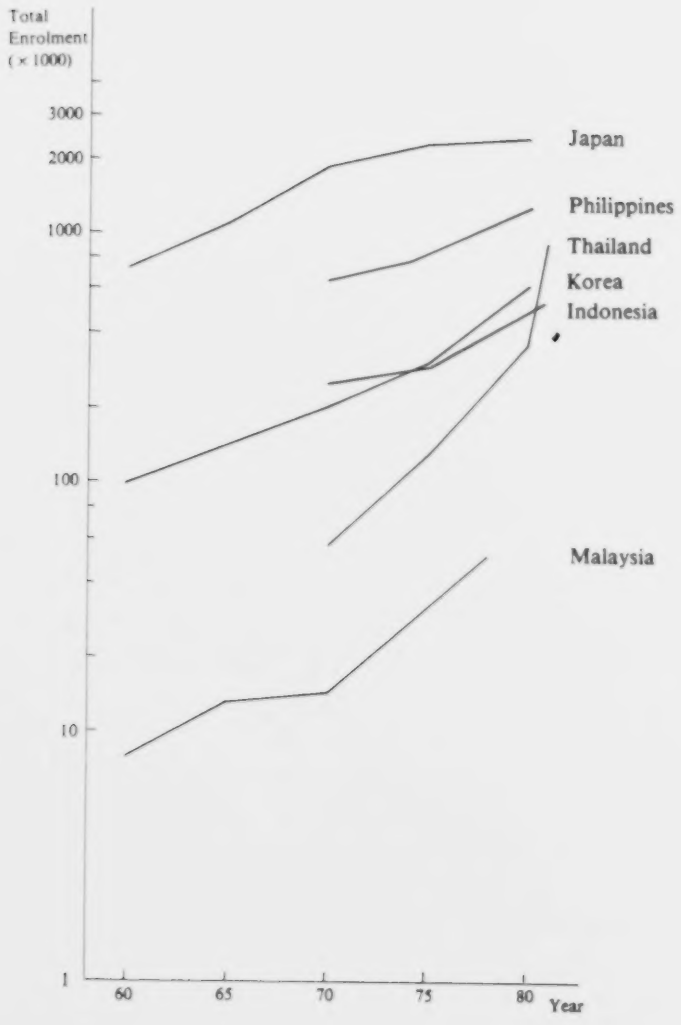


Figure 1. Total Enrolment Growth of Higher Education
(UNESCO:Statistical Year Book, 1972, 1983)

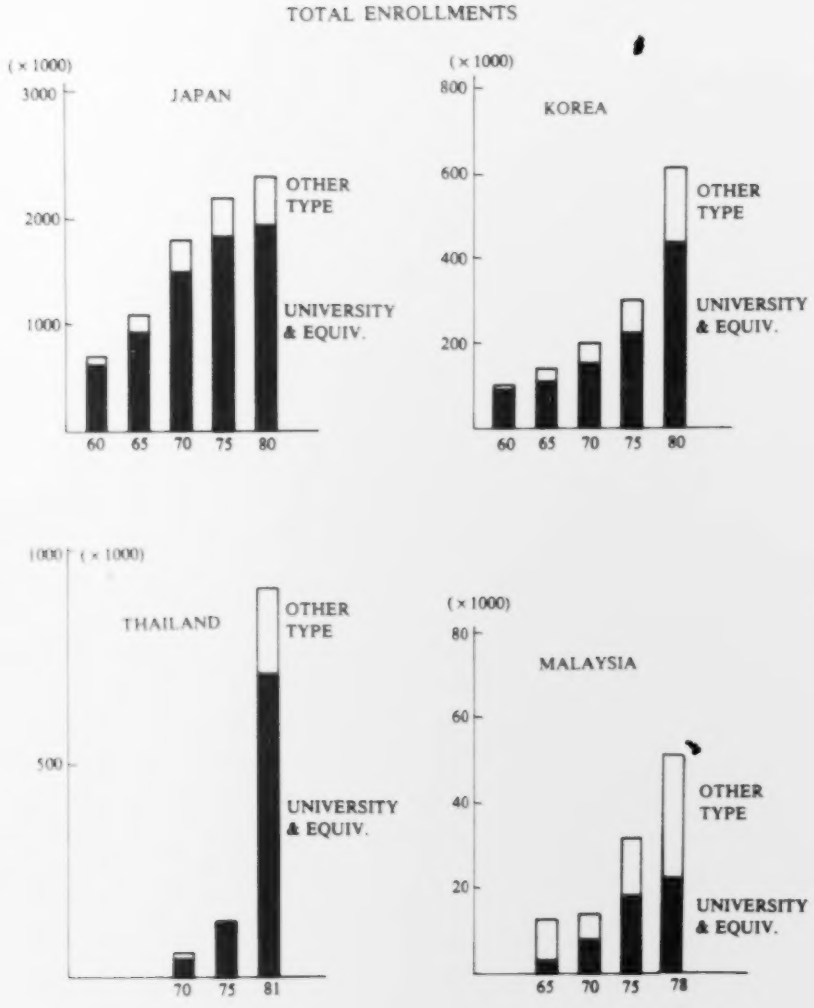


Figure 2. Total Enrollment Growth by Type of Higher Education Institution (UNESCO: Statistical Year Book, 1972–83)

2. Problems in Expansion

1) Access

As a consequence of higher education expansion, the demand for more places in higher education will be accelerated. However, we can find unequal access between the sexes, for social class and for urban/rural and ethnic populations. For some countries, the rate of female enrollment is gradually improving as can be seen in Table 2. However, in Japan and Korea, the female enrollment rate is still limited to around 30%. In Southeast Asian countries the rate of female enrollment has traditionally been rather high i.e., the Philippines (53% 1980) and Thailand (53% 1980); whereas in the case of countries with a high Islamic population such as Indonesia and Malaysia this percentage is not so high.

There are still problems with ethnic groups encountering educational discrimination both overt and covert. Malaysia with its Bumiputra policy is an example of a country having problems in this area. To minimize the regional discrepancies in access, strategies of regionalization of higher educational institutions have been taken in Thailand, Indonesia and the Philippines. This policy for democratization in access must be sought in accordance with the expansion of higher education in the future.

2) Quality

The most important and urgent problems which Asian higher education is facing is to retain quality. Generally speaking, in the process of expansion educational conditions have been deteriorating, for example the student-teacher ratio in Korea, the Philippines and Thailand is becoming unbalanced. In the case of Korea 29:1 (1980), the Philippines 29:1 (1980) and Thailand 25:1 (1981). In Japan and Malaysia there is an increase in faculty members along with the student increase so the student-teacher ratio has not become so out of balance as can be seen in Table 3.

Under this pressing situation, several measures and innovations for quality have been introduced in Asian countries as follows: (a) Many Asian countries have introduced a nationwide entrance examination system in order to maintain the standards of higher education (all the countries represented here at this seminar in fact). (b) To upgrade the quality of university teachers, staff development programs have increased in Southeast Asian countries. The example of Thailand is noteworthy in that the Graduate Department of Higher Education at Chulalongkorn University was established in 1977. One of its objectives is to train persons to conduct staff development programs. (c) To evaluate and improve the course content and teaching technique, the consortia system in Indonesia and the accreditation system in the

Philippines were introduced. The Korean Pilot Institute project in the 1970's is also a program with great merit. Similar initiatives are also taking place in other countries in this region.

Table 2. Percentage of Females by Type of Institution

	Japan	Korea	Philippine	Thailand	Malaysia	Indonesia	China
1960	20%	17	—	—	—	—	—
1965	24	25	—	—	34	—	—
1970	28	24	56	42	27	25	—
1975	32	27	—	40	—	—	—
1980	33	25	53	53(81)	37(78)	—	23(81)

(UNESCO:Statistical Year Book, 1972, 1983)

Table 3. Trends of Student/Faculty Ratio in Higher Education Institutions

	Japan	Korea	Philippine	Thailand	Malaysia	Indonesia	China
1960	9.5	26.9	—	—	—	—	—
1965	10.5	20.3	—	—	9.1	—	—
1970	11.1	19.3	22.5	7.4	—	12.4	—
1975	12.0	19.4	24.2	14.4	—	—	—
1980	11.3	29.1	29.2	25.5(81)	10.2(78)	8.5	4.7

(UNESCO:Statistical Year Book, 1972, 1983)

3) Relevance

A major criticism against higher education in Asian countries has been the lack of relevance to the improvement of society. By and large higher education has not responded adaquately to the needs of society, especially those of national development. As can be seen in Table 4., a change in the distribution of fields of study reflects the needs of the society in the last decade, for example in many countries an increase has been shown in broadly applicable fields such as medicine, engineering and agriculture whereas the areas of humanities, and social sciences show a gradual decrease with the exception of Thailand and Malaysia. As to the natural sciences, we can see a slight increase except in the case of Thailand. In relation to the field of study the imbalance between fields needs to be reformed. In the case of China it appears however, that too much emphasis has been put on applied fields and not enough on the social sciences. Only 3.7% of students are enrolled in the social sciences.

Considering the relationship between university graduates and economic

absorption, matching of university majors and economic demand is very important. Recently significant problems can be seen in the unemployment of university graduates in some Asian countries because of the inability of the economy to absorb them. Another problem of relevance is that curriculum should be modified in order to respond to the needs of diversifying clientele and to keep up with the new and varied functions of higher education.

Table 4. Distribution of Students by Field of Study (%)

Field		Japan	Korea	Philippine	Thailand	Malaysia	Indonesia	China
Education. Hum. and F.Arts	70	28.2	32.7	39.6	32.0	59.9	28.0(71)	
	80	27.0	26.0	8.0	25.7(81)	32.8	21.4(76)	35.0
Social Sciences	70	44.2	21.9	40.5	33.4	12.7	37.6(71)	
	80	38.0	18.1	37.9	68.0(81)	27.7	31.7(76)	3.7
Natural Sciences	70	2.4	6.6	0.0	5.2	12.6	2.3(71)	
	80	2.5	8.5	7.2	3.3(81)	15.4	3.3(76)	8.2
Medicine. Eng. and Agr.	70	24.4	38.7	16.4	26.4	14.8	29.7(71)	
	80	24.7	47.3	42.0	2.9(81)	24.0	28.5(76)	52.2
Others	70	0.8	0.0	3.4	3.0	0.0	2.4(71)	
	80	7.4	0.1	5.0	0.0(81)	0.1	15.0(76)	0.8

(UNESCO:Statistical Year Book, 1972, 1983)

4) Finance and Management

To maintain quantity and quality in higher education, adequate resources must be secured. During the 1970's in many Asian countries public expenditure for all levels of education as a percentage of total government expenditure has been declining as can be seen in Table 5.

Table 5. Total Educational Expenditure of Total Government Expenditure

	Japan	Korea	Philippine	Thailand	Malaysia	Indonesia
1960	—	—	—	—	—	—
1965	22.7	17.2	—	17.3	—	—
1970	20.4	21.4	24.4	17.3	17.7	—
1975	22.4	13.9	11.4	21.0	19.3	13.1
1980	19.6	14.1	10.3	20.6	16.4	8.9

(UNESCO:Statistical Year Book, 1972, 1983)

Public educational expenditures for tertiary education as a percentage of total educational expenditures are increasing, notably for the Philippines and Thailand. Both these countries show recent figures of around 20% as can be seen in Table 6. It can be said that during the 1970's expansion period, one of the main financial priorities of most Asian nations was higher education.

Nevertheless, physical conditions such as overcrowded classrooms, poorly equipped laboratories and libraries have not necessarily been improved due to the lack of resources and resource allocation problems.

Another problem which has come from a lack of resources has been low salaries for academics. These conditions have forced many teachers in Southeast Asian countries to take on additional jobs to supplement their incomes. In countries with a large private sector such as Japan, Korea and the Philippines the private colleges and universities have reached a critical point where the government must give additional support to prevent financial collapse. In Japan for example, national subsidies to private colleges and universities began since 1970. Recently however, the ratio of subsidies is on the decline from about 30% in 1980 to about 22% in 1984 (estimated). This is mainly because of budget cuts through administrative reforms of the Nakasone cabinet.

In line with financial problems there has been a demand for accountability recently and this has resulted in more centralized planning and effective management with wide variations between countries. In regard to government involvement in higher education, new Ministries and Offices of higher education have been established for the purpose of policy formation and supervision as shown in the example of the Ministry of University Affairs in Thailand and the Directorate General of Higher Education in Indonesia. On the other hand, there is evidence that higher education institutions do not want direct government control.

Table 6. 3rd-level Expenditures of Total Educational Expenditures (%)

	Japan	Korea	Philippine	Thailand	Malaysia
1960	12.4	4.2(61)	—	9.6(61)	6.6*(61)
1965	11.0	11.2	—	9.1	6.0*(64)
1970	12.7	8.3	13.2	13.8	10.3
1975	10.2	12.2	22.4(76)	11.1	—
1980	11.1	8.7	22.1	19.3	12.4

* West Malaysia

(UNESCO:Statistical Year Book, 1972, 1983)

To coordinate the university-government relationship, autonomous (to a degree) councils and boards have been established. In Korea the Korean Council for University Education was established in 1982 in order to work for university autonomy through making appropriate proposals and recommendations to the government. In the Philippines, the new Education Act of 1982 prescribed the setting up of a Board of Higher Education as a consultative organ within the Bureau of Higher Education, (MECS).

3. Prospects for Future Development

1) Demographic Trends

In view of the 21st century, the most crucial problems facing higher education in Asia are the population trends. As can be seen in Figure 3, a tremendous increase in the population can be expected. Compared with the present population, the Philippines is expected to have a 40% increase by the year 2000, 37% for Thailand, 31% for both Indonesia and Malaysia, 23% for Korea and 19% for China. These trends will bring great pressures to maintain a mass higher education system. If the problems in the previous section are not effectively dealt with then the quality of higher education as a whole will deteriorate.

2) Diversification

One very important way of coping with this heavy pressure on higher education systems will be to diversify the present system. New types of higher educational institutions which can accomodate more students at one time should be introduced as soon as possible. This is happening to some extent already as exemplified by 1) The Open University in Thailand 2) The Korean Broadcasting University and Open University 3) The TV University in the People's Republic of China, 4) The newly founded Open University in Indonesia and 5) The University of Life in the Philippines.

In order to give a better opportunity for higher education to residents in remote or rural areas, short cycle and vocationally oriented higher education system should be implemented. A wider range of courses and curriculum are necessary for large numbers of adults and part time students who are expected to be enrolled in the next century. Evening courses and intensive summer or vacation programs must be considered as part of the diversification process.

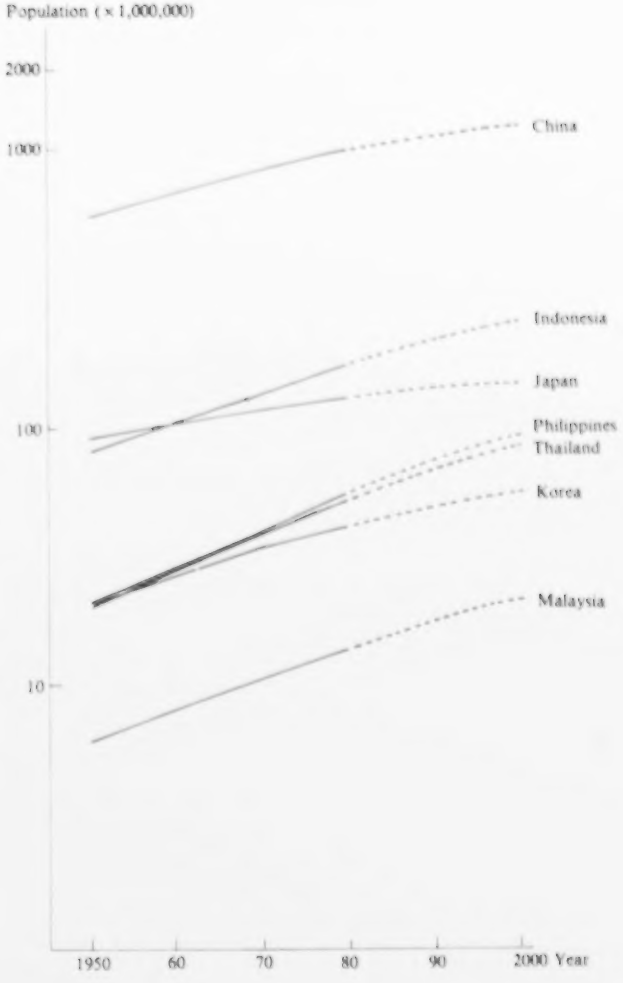


Figure 3. Estimated Total Population:1980—2000
(U.N.Demographic Yearbook)

References

1. UNESCO(Bangkok), *Higher Education in Asia and the Pacific,* BULLETIN of the UNESCO Regional Office for Education in Asia and Pacific, Number 24, April 1983.
2. Philip G.Altbach, *Higher Education in the Third World: Themes and Variations,* Maruzen Asia 1982.
3. V.Selvaratnam and S.Gopinanthan, Higher Education in ASEAN toward the year 2000, *Higher Education,* Vol.13, 1984, p.67—83.

HIGHER EDUCATION DEVELOPMENT IN INDONESIA

Ir. S Pramoetadi*

I. BACKGROUND

1. Historical Resume

The history of higher education in Indonesia dates back only to the later part of the Dutch colonial period. Institutions of Higher learning in Indonesia were established only after the First World War. Those few institutions were for engineering in Bandung, and medicine and law in Jakarta (Batavia in the colonial period). Those first higher learning institutions worked independently and academically were on the same level of quality with those in the Netherlands. At the later part of the Dutch occupation, a faculty of agriculture and a faculty of arts and philosophy were established respectively in Bogor and Jakarta. There was an intention to merge these two faculties with the three older institutions to form a university. The merging, however, was not realized due to the Japanese occupation in 1942.

Before independence, education was available only to a highly selected group of indigenous Indonesians. Out of about 65 million people at that time, the total student enrollment in higher education from 1920 to 1940 was ±3,300 (at any time during that period never exceeding 320 students) as the total number of graduates did not reach 550.

Though the number was small, the educated group of Indonesians was conscious enough in the responsibility for mass education of ordinary people, along with the other forms of struggle to obtain independence and then defend it thereafter. In this regard, it is evident that the history of higher education in Indonesia started only in the late forties with the establishment of the Gadjah Mada University in Yogyakarta and the University of Indonesia in Jakarta.

The early higher education tasks in Indonesia were essentially undertaken by these two universities with other post-secondary training institutions, which were managed by various departments and the armed forces in producing the necessary manpower for their specific needs.

In the colonial period, the teaching staff consisted largely of Dutch nationals and a small number of Indonesian professors and a group of young Indonesian

* Director, Directorate General of Higher Education, Indonesia

assistant lecturers.

Due to the rapid expansion of primary and secondary education following the independence, a number of new universities were established in the second half of the fifties, not only in Java but also in Sumatra and Sulawesi.

The existing universities, however, could not cope with the ever increasing demand for education. Pressure of demand for higher education facilities never ceased since the early history of the republic. The rising consciousness for more regional equity and decentralization policy resulted in a rapid increase of new regional universities. As it is known today, each province in Indonesia operates at least one public university. The spurious growth in the number of new universities, however, did not correspond to the quality and productivity of higher education. Many problems and challenges are faced by those universities. Issues such as quantity, quality, productivity, relevance, equity and the future have never been resolved completely. As to the issue of quantity alone, a very small number of high school graduates who are entitled to pursue higher education can be accommodated by the public universities. To comply with the demand for more space in higher learning institutions, private universities and institutions proliferated especially in the sixties.

Besides the issue of quantity and the need for growth, the educational process within the existing universities suffers from chronic ailments. One example of the ailment is the lack of experience and tradition in running higher learning institutions effectively and efficiently. As can be expected in newly independent counties, the Indonesian universities tend to perpetuate or orient themselves toward the established system prevailing in the former ruling country. In the early fifties, the teaching and learning methods adopted were entirely Dutch, characterized by a high degree of individual efforts without a more systematic approach toward mass education. The teaching staff was predominantly Dutch with a few Indonesians brought up in the Dutch tradition. Besides being inadequate, the Indonesian teaching staff was also inundated with the rising demand for diversification of skill and expertise. The situation was worsened by the exodus of the Dutch in the middle fifties as the result of political uprisings, which caused a vacuum in the higher education process. The need for immediate replacement of lecturers was filled partly by recruitment of lecturers from Germany, Austria and Italy. Also during the late fifties and early sixties, a massive overseas training program for Indonesian lecturers was commenced.

The American system of education began to influence the existing education system in the late sixties through a massive dispatch of American lecturers, educational

aid materials and equipment. Scholarships for Indonesian teaching staff to pursue advanced education in all fields of study in American universities were also started in this period. Technical assistance, however, was concentrated for the development of sciences, engineering, medical sciences, agricultural sciences and economics within the Indonesian system of higher learning. As the result of this cooperation, some larger Indonesian universities became capable of reaching the stage of self perpetuating growth and maturity.

The two differing systems, namely the Dutch-European and the American systems, blend to shape a peculiar system of higher education as it is known today in Indonesia. Within this new system, a number of graduate schools have been established to accelerate the production of qualified university lecturers and researchers. Within a 25 year span, from 1950 to 1975, some marked progresses can be noted, especially in the following points:

(1) the total number of students in the nation has grown more than twenty times, from 10,000 in 1950 to 250,000 in the seventies

(2) the number of public institutions has grown more than twenty times, from a mere two in 1950 to 41 in 1974

(3) the number of private institutions has increased to more than 200 in 1975, while in 1950 there were none

(4) within the same period, the total number of post-secondary institutions under the various ministries has increased in number and kind

(5) a number of graduate programs have been established in some universities in Indonesia.

2. Existing policies

One of the basic development policies in higher education is geared toward a more systematic approach in the process of accelerating the pace of development within the public as well as private institutions through the establishment of a National System of Higher Education.

An open university system is also seriously contemplated and planned. Pilot projects on distance learning are currently operational which serve as the test case for the projected open university system. An open university was established in September 1984.

Basic concepts of development policy in higher education are contained in the Basic Development Policy of Higher Education (which is known as KDPPT) decreed

by the Minister of Education and Culture. The KDPPT was then translated for implementation in the form of a Long Term Higher Education Development Plan (which is known as KPPT-JP) in 1976. The guidance contained in the KDPPT has proved its effectiveness in achieving the goals as shown in the satisfactory results during the Pelita III (Five Years Development) execution of the plan. It is projected in the next Pelita IV, that the same key issues as experienced during the Pelita III period still exist and that they require further intensive efforts.

According to the basic policy document, higher education should be developed along the ideas of its total involvement in the national effort for development. The policy was conceptionalized from the real needs and was thought of as the best way possible to effectively serve the interests of the people. The KDPPT outlined the following strategies:

(1) the role and functions of higher education is an agent for development especially in the modernization process for progress
(2) the main function of higher education is reflected in the Tridarma concept which consists of education, research and public service. The three aspects of Tridarma must constitute an integrated whole.
(3) special division of tasks and orientation among higher learning institutions
(4) the inclusion of new concepts of academic freedom, the teaching and learning process, education as a life-long process and the student welfare
(5) management coordination within each institution and among the national institutions, both private and public.

II. ROLE, FUNCTIONS, ISSUES AND PROBLEMS

1. Role and Functions

There is no doubt that the ultimate role of higher education in any developing country such as Indonesia is to effectively participate in national development. In this respect, it is of utmost importance to identify the role which distinguishes higher education from other national institutionalized efforts.

In attempting to describe the role of higher education, one must take into consideration the variety of conditions observed in society. Almost each country is unique in the sense that it has its own history and its own culture and value system, its own stage and set of problems faced in national development. Against these differing backgrounds, each country will perceive and will need professionals and scholars differently. Furthermore, the role of higher education cannot be separated from the

context of the aims of education in the broad sense. Nurture of character and moral virtue, and the development of academic and intellectual competence are two among other aims adopted in education. Another aim is the preparation of people for various positions in a differentiated, hierarchical and organized society. This pragmatic point of view also suggests that educational institutions should be more dynamic in their function as agents for change, in contrast to the traditional aims of education as a conservative social function of transmitting from one generation to the next the accumulated knowledge and wisdom of society. Higher education should be an agent for development through teaching, research and public service. It is fundamental that this trilogy, which is known as TRIDARMA, constitutes an integrated whole.

Teaching and research are two important complementary activities to which much of the energies of an institution of higher learning are directed. The balance between the giving of instruction and the advancement of knowledge varies greatly from institution to institution and from country to country. It is always true, however, that the development of the individual student is always important in higher education and in fact, at all levels of education.

The primary goal of teaching is to provide the student with an organized body of knowledge which enhances his store of learning and equips him for his career in later life. Moreover, university teaching must inculcate in the student an attitude for critical assessment of facts and values, and an attitude which holds that a grasp of underlying principles is more valuable than the accumulation of facts or the acquisition of skills and techniques. A student must be developed into a person who is much more than must a passive receptacle of information. He must not only be able to comprehend the extent and significance of what is already known within his own field, but must also be sensitive and receptive to what is new, eager to explore it, have the ability to cope with it and work confidently on his own. With these views in mind, it is, therefore, very important that any subject taught in higher education institution must have a definite and substantial content of fundamental knowledge, must be within an area where further advances in knowledge are possible, and must not be predominantly a training in skills and techniques.

On the other hand, it must also be realized that a curriculum which is based solely on inquiry and search for increasingly abstract truth can be disastrous. It can deflect the attention from the problem of how best to train future professionals for their profession. We must not forget that a greater part of students entering a higher

education institution want some kind of guarantee of employability at a respectable job if they fulfill the requirements of a degree. Furthermore, they would like to have the capability to deal successfully with the real world after they leave the campus.

It is clear that one must be able to distinguish the teaching of professions and the search and inquiry for truth. Higher education is a mixture of professional training and the cultivation of teaching and research. Higher education institutions must be able to respond to varying demands, accept the coexistence of basic and applied research, train scientists and high level professionals. At the same time, one must be continuously aware that the work settings of professionals and scholars are changing. The nature, scope, depth, and extent of problems faced by mankind today are not the same as those of ten or more years ago. Problems in the future will involve more and more complexities and interdependencies. Population growth, natural resources depletion, and environmental deterioration are samples of problems of global nature faced by mankind today. These problems cannot be approached sequentially by applying one discipline at a time, but need a parallel and coordinated multidisciplinary approach. Furthermore, solutions to these problems need much more than the sophisticated capabilities of the professionals and the scientists. Clearly, a student with a large body of knowledge and with a highly developed analytical capability is not necessarily prepared and able to deal with such problems and complexities of the world. This leads to another dimension in higher education, that of developing social and global consciousness, a human faculty which is needed for the survival of mankind.

2. Issues

In the conduct of playing its role, higher education in Indonesia faces several fundamental issues. There are no clearcut answers as to how to cope with these issues which are subject to existing political, economic, social and cultural contexts.

a. The issue of QUANTITY

It has become a fact that the demand for entrance to higher education far exceeds the capability of existing institutions to absorb. Presently, only less than 17 percent of applicants to public universities can be admitted. At the end of Repelita IV, assuming that no substantial high level policy intervention will occur, only less than 10 percent of applicants to public universities will be accepted. At the same time, it is fully realized that the total student population in both public and private higher education institutions is low for a country with a large population

of more than 130 million.

b. The issue of QUALITY

The demand for quality higher education comes from all sides, the students, the parents, government constituencies, private sectors, and society in general. Despite this fact, all existing quality indicators point to low to mediocre quality education offered by higher learning institutions in Indonesia. The low percentage of full-time teaching staff, the lack of qualified teachers with advanced degrees, insufficient laboratory equipment and library materials and facilities, are just samples of indicators which reflect quality.

c. The issue of PRODUCTIVITY

Limiting the concept of productivity to quantitative aspects, the number of graduates produced by all higher education institutions is low. This is especially true for some fields such as engineering and sciences. The number of research products such as publications and patents which are recognized internationally are also low with almost none in engineering and sciences.

d. The issue of RELEVANCE

Relevance comes in many faces. The types of disciplines, the proportion of each discipline, the structure and content of the curriculum, the problems addressed in research and other program of activities in relation to the perceived need for the present and the future. These needs can be of national, regional, international, or just humankind concern.

e. The issue of EQUITY

In the absence of other issues, equity is an issue of its own. In the presence of other issues, equity may become an issue of immense dimension. With job scarcity, who will be admitted to tertiary education? Must every higher education institutions in each province conduct graduate programs in some fields of study? Must every province have a school of engineering? Many other questions can be raised in relation to individual and regional equity.

f. The issue of THE FUTURE

With the rapid rise of science and technology as a resource for solving human problems, the vast accumulation of knowledge which generates new fields of study, and the mounting complexities of problems faced by mankind, higher education may not be able to respond fast enough to these challenges. As a result, higher education may not be preparing students for the world they will live in when they graduate. Furthermore, the existing disciplines which are bound to government

regulations will not produce professionals and scientists in new fields which are needed by the country to actively participate in the very competitive international scene.

3. Problems

In the attempt to cope with the issues in higher education, various problems arise. These problems have to be dealt with simultaneously which compounds the enormity and complexity of the tasks to be performed in higher education.

a. Teaching staff

Although the number of head counts may reflect some degree of availability, there are strong indications that the total full-time equivalence dedicated to teaching are below the minimum required for effective instruction. This is especially true for much needed disciplines like engineering, sciences, and new fields such as microelectronics and computers. If we further qualify full-time equivalence with possession of advance degrees as indicators of quality instruction, the situation is even worse. In some universities and in some disciplines, the availability of qualified full-time equivalence may be barely sufficient.

b. Research staff

Quantitatively and qualitatively, the situation here is very much worse than teaching staff. Again, in some universities and in some disciplines, the research situation may not be too bad.

c. Staff motivation

In almost all engineering disciplines, several branches of science, economics and business administration, and health professions, higher education institutions have to compete with the private sector. In other disciplines, insufficient incentives force teaching and research staff members to hold more than one job in order to be able to meet their perceived standard of living. This situation creates an insufficiency of qualified full-time equivalence for the conduct of quality and effective teaching and research.

d. Management

Weakness in managing the conduct of both academic and administrative activities is the prevailing situation in higher education institutions in Indonesia. A career in higher education management at tertiary institutions is not attractive enough for university graduates with proper qualifications. Besides competition with the private sector the importance of knowledge and skills in the management of education is not well perceived by the teaching staff which, de facto, occupy most of the

available management and administrative positions in higher education institutions.

e. Data

The lack of data for planning and operational purposes in the conduct of higher education is only one of many manifestations of the weakness in the management of educational institutions.

f. Student input

The quality of student input can have a great impact on both effectiveness and efficiency, and hence productivity, of higher educational institutions. Fierce competition for available seats among high school graduates may help create an incentive for high school system to devise means which, on the surface, seems to benefit the prospective student but in reality may render student performance at high school a bad criteria for acceptance in tertiary educational institutions. To construct a set of criteria in order to detect high school graduates having great potential for success in completing tertiary education is complicated by various factors which are outside the reach of one single directorrate general.

g. Library materials

The library situation in Indonesian institutions of higher learning is far from satisfactory. There are two problems in relation to libraries. One is the number of reading materials available to students and teaching and research staff. The other is the foreign language proficiency so as to be able to read the available materials.

h. Laboratory equipment

On the average, laboratory equipment for teaching and research purposes are not satisfactory. The problem faced in this area is the utilization and maintenance of equipment.

i. Scope

Most of existing higher education institutions have less than the minimum square meter space per person which is not conducive to effective teaching and learning process and research activities. Again, the basic problem here is the utilization and maintenance of space.

III. DEVELOPMENT STRATEGY

In coping with the issues and problems of higher education in Indonesia, it is clear that there is no best way. Being unable to solve one problem does not mean to forego other problems. Simultaneity of decisions with each decision carrying its own risk and the rational choice of the decisions is the fundamental nature of

development efforts. In this respect, some kind of strategy has to be adopted.

1. Priority Setting

Some priority scheme has to be set up due to national development needs and resources limitation. Areas subject to the priority schemes must be identified. Priority decisions on higher education development are based on the projected needs of national development and the limitation of available resources. Higher education should be able to produce appropriate manpower in appropriate time for carrying out tasks in various fields of disciplines required by the process of industrialization. Past and present experience shows that higher education development is still not functioning to produce manpower required in the development process. The situation points to giving priority to the following fields of study: engineering, sciences, management, teacher education and accountancy. The field of agriculture and health which have been given priority in the past, are still highly relevant to the present needs of development, therefore, still need to be further developed for consolidation.

The question of equity between the island of Java on one hand and the outer islands on the other is pressing and needs immediate action. One of the new ideas answering the equity question is in the form of Specific Growth of Fields of Study Pattern (or Pola Ilmiah Pokok) which will guide the course of development of specific higher learning institutions according to the field of priority, local conditions and the potential capacity of the university. The Specific Growth Pattern concept is also expected to draw high school graduates to come and attend universities outside of their location of residency.

Another field of priority is in the graduate education program. The consolidation effort in the undergraduate study program (S_1 strata) faces some inhibition due to the shortage in qualified lecturers. In this regard, provision of qualified undergraduate lecturers must be made through the S_2 and S_3 graduate education programs. The graduate study programs will essentially fulfill the need for university lecturers for both public and private universities. Besides serving as a vehicle for teaching staff development, the S_2 and S_3 graduate programs are also expected to provide high ranking management and engineering staff for the nation.

Development of learning resources is another field which needs immediate attention. One of the most important learning resources is the library. The number of volumes and titles of university textbooks must be increased, considering most of the libraries in Indonesia are in a state of disrepair. Original book writing or

translation of essential textbooks must be encouraged to provide better learning resources for the student. Instructional materials to make instruction more effective must also be provided.

English proficiency of students and in many cases, of the teaching staff must be improved considering the importance of English in mastering science and technology. Transfer of knowledge will be greatly facilitated by the mastery of the English language.

2. Staff Development

Staff development in higher education includes the need for quantitatively increasing the number of lecturers and quantitatively improving the quality of teaching. The quantity of lecturers required will be directly commanded by the students admitted in the higher learning institutions. The number of students admitted is influenced by the real demand of the population or as directed by national planning to provide educated manpower. In conjunction with the development planning in higher education, the government projected the increase of total student enrollment (S_0, S_1, S_2 and S_3 strata programs) from 377, 950 at the end of Pelita III to 764,400 at the end of Pelita IV, especially in public institutions as shown in the following Table 1.

Table 1. STUDENT Enrollment in Public Institutions at the End of Pelita III and Pelita IV

Program	End Pelita III	End Pelita IV
Diploma	70,000	150,000
S_1	300,150	457,800
S_2, S_3	2,800	6,600
Open University	5,000	150,000
Total	377,950	764,400

Source: Memo Program Koordinasi Direktorat Jenderal Pendidikan Tinggi 1983.

In an effort to improve the quality of teaching, the DGHE projected the improvement of student-teacher ratio and provision higher education learning by S_2 and S_3 degree holders. Based on the projected target of S_1 student enrollment, the number of teaching staff and the student-teacher ratio, the number of new teachers must be increased from 21,291 in 1981/1982 to 94,490 in the year of 1999/2000 as shown in the following Table 2.

Table 2. Quantitative projection of S_1 Program, 1981/1982 — 1999/2000

	1981/82	1988/89	1994/95	1999/2000
S_1 Enrollment	260,637	457,800	630,000	854,000
Number of Teaching Staff Required	21,291	38,295	59,050	94,490
S_1 Student-Teacher Ratio	12	12	11	9
New Teachers Needed/Year	2,260	3,470	6,300	9,700

Source: Memo Program Koordinasi Direktorat Jenderal Pendidikan Tinggi 1983.

The effort in quality improvement in teaching technique and the higher qualification of teachers must be followed by the intensification of staff recruitment. Several ways have been tried to attract prospective S_1 graduate to join university teaching staff, but the result is still less than satisfactory to motivate the young graduates to join the teaching staff if the 9,700 new teachers must be achieved at the year of 2000.

To increase the quantity of teachers according to the projected needs is not an easy task. To improve the quality of the existing teachers is even more challenging. The university as a higher education institution is responsible in helping to keep abreast with the advancement of science and the needs of society. In order to be able to carry out the tasks, universities must provide their teaching staff as the source of valuable brainware with various training, upgrading and the advanced degree programs. Education formality may be achieved through fellowships in graduate education such as the S_2 and S_3 or overseas advanced degree programs.

3. Infra-structure Development

A successful staff development and management program should be supported by the simultaneous development of university infra-structure, especially academic support for the "humanware". This would entail the strengthening of research (the production of knowledge) and instruction (the reproduction and dissemination of knowledge) which would be accelerated through the provision of foreign experts, a strong inter-institutional relationship, adequate research funds, facilities and equipment.

Needed facilities and equipment include such items as computers, printing

apparatus, laboratory and library holdings. In addition organizational arrangements (inclusive of staffing), joint research programs, instructional activities and in-service-training programs should be planned and developed at those graduate faculties participating in the projects. The government continues to support the inter-university center concept as an organizational means in improving research and instruction through the inter-university sharing of limited resources.

4. Management Development

Management development covers both levels of university or institution management and the Directorate General of Higher Education management. Management improvement programs should include strengthening in planning, management in teaching and learning administration as well as planning and management of academic infra-structure.

At the university level, management improvement is geared toward a standardized administration structure as was already decided in the Government Decree number 5/1980 (PP 5/1980). Reorganization of university administration is evident in the simplification effort and clear division between the student and academic administration and the University administration in general. The reorganization is expected to improve efficiency and effectivity of the existing university management system.

The lack of professional experts on university management is also felt as a hindrance in management development effort. Most of the key positions in the hierarchy of university administration are held by teaching staff who are sometimes there as a matter of a routine tour of duty. There is a high turn-over rate also. This situation can lead to unprofessional university management and also result in the reduction of teaching activities which are needed for immediate improvement.

Management development dictates a more firm recruitment of professionals or better training and upgrading of management skills for middle level administrative personnel.

To be effective, the management system needs the support of a good management in information systems as well as monitoring and evaluation. Both monitoring and evaluation systems and management information systems are needed to provide information for the formulation and modification of policies. Improved planning and management, through establishment of such systems, training and the appointment of permanent staff would strengthen the DGHE's capacity to provide assistance to universities in their academic and campus planning. The main responsibility of

the Directorate General of Higher Education is to formulate policies, to develop plans, to coordinate curriculum development and measure the efficiency of execution of policies and plans. The effectiveness of the DGHE is, however, constrained by two problems; the lack of a permanent cadre of professional staff, and the lack of monitoring/evaluation and management information system. Management positions at DGHE are mainly filled on a temporary basis with seconded university staff. Those conditions are not conducive toward a good management development programs. Institutional research done at both university level and the DGHE level must be initiated to support the need for development planning of higher education.

5. Student Admission

Indonesian higher education is facing the typical economic dilemma, that of limited resources and virtually unlimited needs. In particular, in a time of limited budgets the system has an explosion of candidates while the country has need for better educated and trained high level manpower. The limited number of trained manpower at all levels is recognized as the single most limiting factor on Indonesia's development. Many of Indonesia's problems in higher education are tightly linked to admissions policies although it is true that they will only be part of the solution. The importance of the policies will clearly depend on what is being taught, how well, and toward what purpose, as well as on the quality of the applicant pool. As we all realize, a system of higher education also depends on the quality of the secondary and primary school systems, and on the academic ability and motivation of its young people.

Over the next decade, the government plans a rapid expansion of higher education. As the system of higher education expands, the importance of better selection procedures also increases.

The first dimension of admissions policy is increasing the *efficiency* of what might be called "academic production". As enrollments expand and pressures mount to produce more graduates, there will also be strong incentives to lower academic standards. If this "lowering" is simply a way of making the curriculum more relevant to the needs of the nation, it is to be welcomed. But the experience of many other developing countries shows that lowered standards may induce a dynamic of educational mediocrity, producing graduates who are not qualified to assume a leadership role in the society. Admissions policies may be able to forestall lower standards, if qualified students can be more accurately pinpointed in advance.

Admissions policies have another dimension, which is also of great importance; *the equity of selection*. Several kinds of "representativeness" can be distinguished; by geographical region, ethinc origin, sex, socioeconomic class, rural/urban, and perhaps others.

Equity in these dimensions may be defined in various ways; selection by unbiased tests, equal representation according to population, equal representation according to the applicant pool, and other ways. Ethical questions are raised. Should a person with equal qualifications be treated differently just because he or she belongs to a certain ethnic or geographical group?

Testing and selection entail costs, and this is the third major dimension of admissions policy in Indonesia. Since 1984 student admission to public universities has been centralized. In this centralized system new students can be admitted based on their high school performance or through a national entrance examination.

6. The Process of Education

A major issue in university education in Indonesia is the inability of the system to produce sufficient output of trained manpower needed to carry out development programs. Present university education has not kept pace with the expanding need and can meet only about one fourth of projected manpower needs in engineering, science and economics/ accountancy and about two thirds of the needs in agriculture. This low level of output is chiefly due to internal inefficiency.

The low internal efficiency of the university system is attributed to various factors, including insufficient time devoted by staff to teaching, poor quality of staff, the inadequacy and poor planning of physical facilities, inappropriate promotion and graduation policies, and the socioeconomic status of students.

Two staff-related causes for the high rates of failure and dropout and for the long time it takes for students to graduate are insufficient instruction time, and poor quality instruction. Although the ratio of full-time staff to students is good, at 1:12 that measurement is deceiving because full-time staff do not spend enough time teaching or tutoring students. This is largely due to inadequate university salaries compelling most of the faculty members to hold other jobs.

The poor quality of instruction can be attributed to the low academic and professional qualifications of faculty members. For example, less than 3% of staff in public universities hold Ph.D. degrees.

Physical facilities of most universities are inadequate due to the lack of

investment, poorly planned due to the absence of campus master planning, and poorly scheduled due to the lack of class scheduling. These problems constitute a constraint to improving internal efficiency of the university education system. Specialized facilities, even when used beyond planned capacity, are not sufficient to accommodate all students enrolled in a particular year. Consequently, some students have to wait for another year to be accommodated in the course. For lack of facilities, certain faculties are forced to use existing, but inconvenient, facilities elsewhere.

There is also a problem of overcrowding and underutilization due to poor campus planning and class scheduling. Facilities have not been laid out according to a campus master plan. Consequently, sharing of facilities between departments and service teaching are greatly curtailed. Many rooms and laboratories were built too small to accommodate enough students to allow for an efficient student:teacher ratio. Poor class scheduling has led to underutilization of existing facilities. Lecture rooms may be used only in the morning and laboratories only in the afternoon. Because many teaching staff are part-time and have their regular jobs in the morning, a large proportion of instruction takes place in the afternoon, leaving many facilities idle in the morning. In order to improve student flow and output, there is a need to provide adequate facilities to accommodate students and, at the same time, to use more rigorous planning and scheduling to improve the utilization and sharing of existing and added facilities.

There is serious inadequacy in the supply of textbooks and other instructional materials in Indonesia which compounds the weakness in the quality of education caused by poorly trained staff. Although Bahasa Indonesia is the medium of teaching, there is a shortage of basic textbooks in Bahasa Indonesia for most disciplines. Library stocks of textbooks in any language are also limited. The student/book ratio of major Indonesia universities ranges from 1:8 (Gajah Mada) to 1:15 (Indonesia). In comparison, the University Singapore has a ratio of about 1:100; the University of Malaya, 1:60; and the University of the Philippines, 1:30.

The short supply of instructional materials and laboratory facilities and equipment reinforces the already strong inclination of teachers toward the lecture method and rote learning. As used by inexperienced and underqualified staff, lectures tend to be dull expositions of textbooks. Oral presentations are supplemented by brief lecture notes prepared by the teacher and sold to the students to replace textbooks as the primary source of information. Seminars, tutorial and other small-group teaching methods which allow discussions are occasionally used in some disciplines but

they are the exception rather than the rule. To make the teacher/learning process more effective, staff should be trained in more efficient methods and equipped with appropriate instructional materials.

As an important measure to improve internal efficiency, the Government announced in July 1979 the gradual introduction of a credit system of course requirements (Ministrerial Decree No.211/U/1982). Under the credit system, each course of study will consist of a set of required and elective courses. A student who successfully completes a course will be given educational credit for it, independent of his/her performance in other courses, and will be eligible for graduation when he/she attains the number of credit required for the degree of diploma.

7. The Multistrata Higher Education System

A new system of educational stratification was introduced in 1979. A gradual introduction of credit system of course requirement was inititated. Under the new credit system, courses are grouped into compulsory and the elective courses.

Within the new strata system of education there is also divided into two major streams of academic and vocational or professional (which is coded by S_0 or Diploma Programs).

The academic stream consists of three levels or strata which are coded S_1, S_2 and S_3. The S_1 (strata I) is an under-graduate study with a required load of courses of 140—160 semester-credit units and may be completed in 4 ½ years of study. The graduates of the S_1 program are entitled to the *Sarjana* degrees.

The S_2 program requires a minimum course load of 40 to 50 semester-credit-units beyond the S_1 credit requirement. The time allocated to finish the S_2 program is two years with a maximum extension of another two years. The S_2 graduates are entitled to a post-graduate degree.

The S_3 program requires yet another 40 to 50 semester-credit-units beyond the S_2 load requirement, and the graduate students are expected to finish the program in two years. The S_3 program is a doctorate or Ph.D. program. The multistrata structure is visualized in Chart 1.

In addition to the academic stream another different stream for a professional career is available especially for those in the teaching profession and other specialized fields of study. Some examples of the professional degrees are the Diploma I, II and III in educational sciences, the Diploma I in cartography or photogrammetry, the Diploma III for surveyor, the Diploma IV in polytechnics, and the specialist I

and specialist II in highway engineering and medical sciences. The multistrata flowchart is depicted in Chart 1.

8. National System of Higher Education

The basic development policy guidance (KDPPT 1975) points to a National System of Higher Education as an ultimate goal of both public and private national higher education systems. Since then, several actions have been implemented toward the goal, among others are:

a) Country-wide application of credit system in higher education institutions; a step-by-step application of credit system in public universities has been under way for some time and has shown good results. The credit system has also been introduced and implemented in the private universities following its implementation in public universities. With the credit system applied nation-wide, the student mobility from one university to the other is made possible.

b) The introduction of a new multi strata system at the national level is meant for higher education system to be able to supply trained manpower needed according to the pyramidal need of manpower. The multi strata system is also designed to accomodate the student mobility from one field of study to the other (cross-field of study) which results in more flexibility in filling the need of relevant manpower and also may reduce drop-outs due to inappropriate choice of field of study.

c) Quality standard of education is maintained through a system of certification and accreditation of private universities. Assistance provided in developing curriculum and financial needs to private universities are examplary to the serious effort of the government to realize the National System of Higher Education in Indonesia.

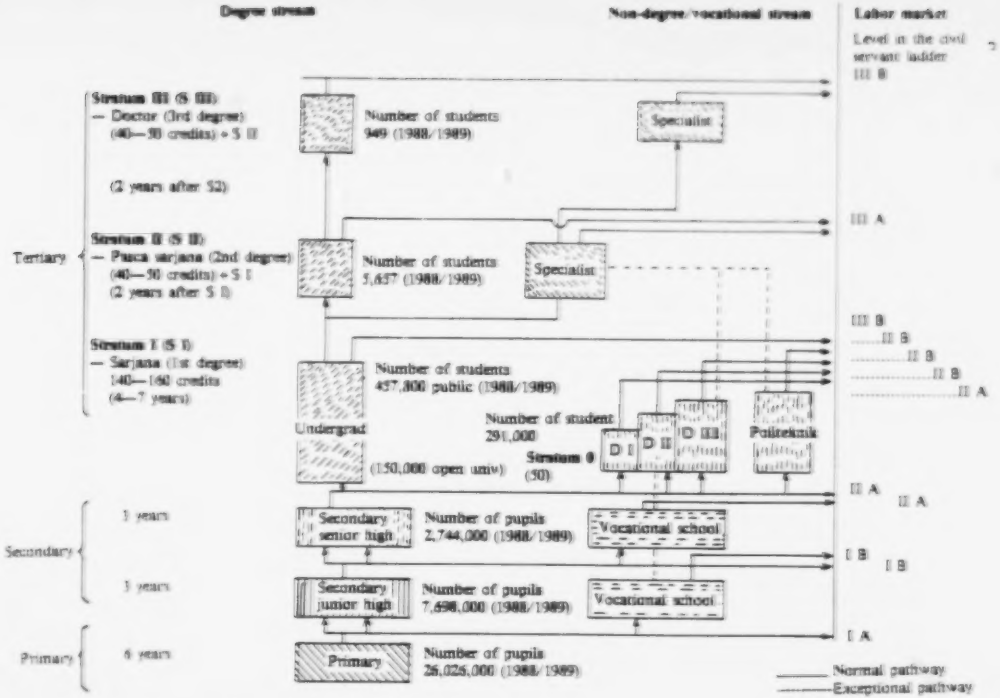
d) Various guidance and directions contained in the DGHE Memo Coordinated Program which is published every year is another action done to realize the unified national system of higher education.

e) Division of role and function of universities within the public and private institutions has been formulated and initiated. The concept of the division of role and function still needs further improvement.

Stress on action has been done toward the common ultimate goals and purposes in the national system of higher education. But still much more effort must be done to improve the relatively young and inexperienced higher education system in Indonesia. An all out effort should be made to improve efficiency and performance to face the rising challenges to come.

BEST COPY AVAILABLE

Chart 1. Multistrata Structure of Formal Education



9. Open University Development

The main purpose of an open university is to provide opportunities for high school graduates who cannot be admitted to the regular tertiary educational institution.

In addition, it also provides training programs for those already employed.

A pilot project on long distance learning was implemented as small scale programs for Educational Diploma II and Akta V. It is scheduled that in September 1984 a formal "UNIVERSITAS TERBUKA" (literally means "Open University") will be established covering Diploma programs and S_1 programs.

Characteristics of the Open University as a sub-system of higher education in Indonesia are, among other things:

(a) Delivery systems will be printed media, radio as well as television broadcasting;
(b) Participants or students are not limited in quantity, as long as they are graduates of senior high schools and at least 20 years old;
(c) Lecture rooms are not needed;
(d) Time and duration of study basically depend upon discipline, strength, willingness and ability of each student, although there will be something like a "Guide Book" for study in this subsystem;
(e) There will be regional study centers located in some regions throughout the country, and special lectures will be given to students living in the region in the closest university while the university is on vacation;
(f) There will be some tutors assigned to assist students to solve their study problems;
(g) There will be some special logistics, where, for example, some materials and practical kits are stored before being sent to students;
(h) Each lecture will be prepared, formulated and developed by a team comprising a subject matter specialist, a producer from RRI or TVRI or any other similar institute, a tutor, an educational technologist, a subject matter coordinator and some other staff related to production such as an editor, designer and a project controller;
(i) Assessment and evaluation of the student's academic progress will be done through tutors as well as computers;
(j) Formal examination will be conducted at universities, schools or other public places appropriate for that purpose. The student enrollment for 1984 is ±53.000 students.

(a) Five thousand students for distance learning in the Akta V program (mainly university lecturers);

(b) Ten thousand students for distance learning in Diploma I and II programs (mainly junior high school teachers);

(c) Thirty eight thousand students for distance learning in S_1 programs (senior high school graduates).

10. Private University Development

The private university sector has also gained attention to be coordinated and assisted in order to participate in the higher education development in Indonesia. Since the beginning of the seventies, demand for higher education increases tremendously, in direct correlation with the ever increasing university level age group in the country.

The limited education capacity of public universities is evidently not in a position to be able to accomodate the whole.

Therefore, through the Long Term Education Development Plan (KPPT-JP) 1976, it is stated that private universities are an integral part or as a subsystem of the overall National System of Higher Education.

Although its role in education development in the country is recognized, support and attention to the development of private universities is still inadequate. Available data suggest that the productivity of private universities is still low, much lower than their public university counterparts, although some of their teaching staffs are provided by public universities. This kind of cooperation, between the public and private universities, does not alleviate the chronic problems faced by most of the private universities.

Private universities are coordinated through several Regional Private University Coordinators (known as Kopertis). In total there are nine Kopertis operating throughout Indonesia.

At the end of Pelita IV, the enrollment capacity of private universities is expected to be doubled from the figure in 1981. Although government already extends its assistance to provide part of the the teaching staff to private universities, the shortage of teaching staff at private universities still constitutes the main problem. Therefore, in Pelita IV period, Graduate Education program must still be stressed, to cope with the problem of teaching staff shortages, either quantitatively or qualitatively. The production flow of teaching staff can be seen in Chart 4.

For further effective optimization of the teaching staff a more balanced distribution in disciplines and in geographical region must be pursued. A sound development planning in this regard is needed.

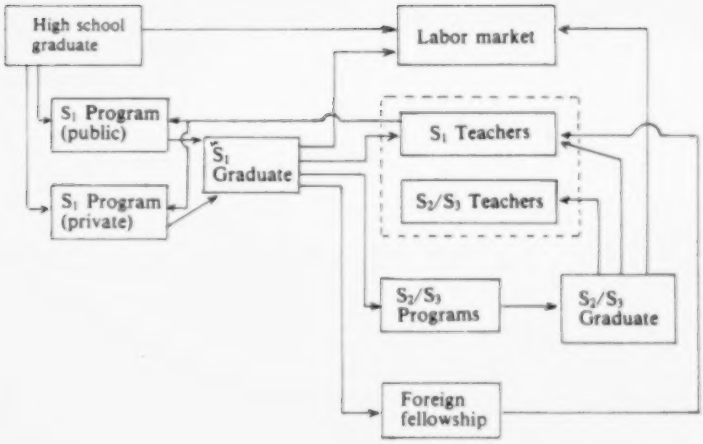


Chart 4. Production Flow of Teaching Staff

To be more efficient, private universities should probably concentrate on the non-degree or diploma program to fill the respective regional needs rather than to pursue a full-fledged university operation.

11. Higher Education Network for Cooperation

A higher education network for cooperation is included in our priority list, to improve the existing higher education productivity in the country. Although the network of cooperation is stressed as a national priority, through Higher Education Network for Cooperation (BKS), regional and international network for cooperation deserves far more serious consideration. Sporadic bilateral cooperation between individual universities in Indonesia with those of other countries should be strengthened into a more intensive and continuous long term form of cooperation.

More developed national universities in the country must be encouraged to make contact and then establish cooperation with universities in foreign countries to help keep up with the latest development of science and technology in the world and as a channel for technology transfer. Such cooperation is also expected as an important avenue to provide advanced degree learning for Indonesian teaching staff in universities overseas.

Funding agencies can play an important role in the establishment and coordination of the projected network for cooperation. Due to a more or less similar level of development in higher education, common interest and economic achievement, an ASEAN network of higher education is the next important step to improve higher education in the country.

The fast expanding industrial and general economic development in East Asia, must also be reflected in the university cooperative linkages in the country. National universities should reorient themselves and cooperate more closely with the higher learning institutions in Japan, Korea and China to tap the technological expertise rapidly expanding in those countries. A *Look East* orientation may possibly be considered to balance the ever increasing dependency of national universities to those in the West.

« COMMENTS ON PROF. PRAMOETADI'S PAPER »

W.K. Cummings*

My main qualification for making any comments is that I was in Indonesia from 1977 to 1981 for four years. However now, I feel as if I know nothing about this very rapidly developing system. During my period of stay I developed a great admiration for Professor Pramoetadi who is certainly one of the most extraordinary innovators in higher education in the world. He had a tremendous influence on the development and structuring of this new system. After leaving Indonesia and getting away from the more practical aspects of the system I spent some time studying the history of the system and it is to me a very exciting one.

As one compares different university systems some follow directly from their colonial origins in a process of relatively smooth transition and they reflect their colonial origins. Other systems however, wrench themselves from their colonial origins in a more or less radical way. It should be pointed out that not only Indonesian higher education but the whole society is one which was formed through a very dramatic and impressive revolution, and I think this is very important to the spirit of the development of the higher education system and has allowed indeed the development of a whole new set of directions.

One point that I don't think we can grapple with in this seminar but I would just like to mention is that as a system develops, (in the case of Indonesia from almost a new start) there is a question of how a system evolves, how it matures, at what stages for example does the staff training begin to turn indigenous as opposed to going overseas, at what stage does the university become less concerned with relevance and more concerned with "irrelevance" which is often one of the more important products of a university, i.e., those people who simply don't do anything productive or make a useful contribution.

I say this partly in reflecting on the American system where it took a very long time. I think really after WW II there was a lot of irrelevance in American higher education. But all of us can reflect on the evolution of our university systems.

Since I am from the U.S. I picked up on one very small matter which is just a historical matter. Professor Pramoetadi mentioned in his paper (pg.3) that the

* Senior Specialist, The East-West Center at Hawaii

American influence began in the 60's; actually it began somewhat earlier, to be more exact in the 1950's and this is not necessarily due to a positive interest in America but due to a conscious effort to sort of disavow the Dutch origins of the system. So Indonesia was anxious to look for other models. But it wasn't only the American system that was viewed at that time. Indonesia was quite interested in the English, the Soviet or the socialist models of higher education and so all of these had a tremendous influence on the system. But over the long run, American influence was indeed great; some areas most objectively obvious in terms of staff training.

As I see it however, the most important impact of the American system was related to productivity, that is in recent years, Indonesia has developed what is called the credit system. Instead of having a student take an exam, when the student feels he is prepared the student goes through a systematic program of recieving credits for courses primarily in a lecture form. This is a peculiar American structuring of the educational experience. Whether it finally leads to productivity or not I think remains to be seen. I think there is some progress from it. This leads to one observation, being that the introduction of credits and systematic lectures leads to a very busy university. This struck me on my recent visit. In one sense the Indonesian professors in the past were very lax in their lectures and often missed lectures. In the better universities today they seem to be very diligent and very busy in giving lectures in grading papers and amusingly in computing grades.

The administrators are heavily involved in computing grades and trying to put them in computers which don't usually work. Thus they have to work 18 to 20 hours a day (I suspect there is a high mortality rate among administrators particularly among those who try to run the system). But with the concern for productivity, universities become much busier places and they lose some of that freedom they once had. This problem becomes aggravated as one pushes for expansion. On the problem of expansion there is something underlying expansion that we have to deal with here and that is that all systems are faced with a great private demand.

I'm not sure what is private and what is social demand in higher education but the private demand seems to be a demand for degrees. It gives status and supposedly entitles one to get a good job. A degree often has to be from the best universities or at least it has to be from a university. So this is a question I have for Prof. Pramoetadi, that is, how to break away from academic degreeism. I think this a common problem. On of the reasons the computers don't work is because that every one has to have a degree and therefore no one is prepared to be "just a computer programmer",

to be something less than a university graduate. And so, in terms of the strategy of Indonesia what is the approach to getting fewer people who are after degrees and more people who are interested in a technical education. This strikes me as a common problem, how to cool this demand for degrees; how to increase Junior colleges. or something "less" but if you call these institutions "non formal" universities this approach may not work. Of course this brings the question in of private universities.

I was very interested in the scouting system for entrance, getting people into the university without exams. This is one way of cooling the exam competition and this may help Indonesia avoid the crises of tremendous competition for university entrance. My final comment is that as systems evolve they have to go through a tremendous period of expansion, of busyness and of relvance. But at some point a university system wants to have the distinction of having contributed to basic research. The Japanese universities for example have contributed even in their early history to research on infectious disease and earthquakes. Much research has not been publicized on a world scale but there were a few cases which gave the university system pride. I am sure that there are some cases where Indonesia's system is trying to make a world class contribution at great expense. I would be interested in knowing what the strategy is in such cases.

PROSPECTS AND PROBLEMS IN HIGHER EDUCATION EXPANSION: MALAYSIA

Azman Wan Chik*

INTRODUCTION: Background to Higher Education in Malaysia

The growth and development of universities in Malaysia could be said to have began in 1957, the year we gained our Independence. Prior to 1957 higher education was confined to the University of Malaya in Singapore. Since independence, the growth of higher institutions of learning in the country developed to the present day situation due to the improved opportunities for education for the masses which began in 1961 with an Education Act propagating free universal primary education. Today, Malaysia with a population of over thirteen million has six universities to cater to the growing demand for high education. Table 1 shows the universities and the year of establishment.

Table 1. Universities and Year of Establishment*

No.	University	Year of Establishment
1	University of Malaya	1959
2	University of Science Malaysia	1969
3	The National University of Malaysia	1970
4	University of Agriculture Malaysia	1971
5	University of Technology Malaysia	1972
6	Northern University of Malaysia	1984

* List does not include non-university higher institutions of learning such as Tunku Abdul Rahman College, MARA Institute of Technology.

The growth of these universities could be linked with the development needs of the country. Whilst the University of Malaya which was established in 1959 to cater to the needs of manpower in the Arts, Science, Engineering, Medicine, Economics and Education, to fill the post-independence immediate needs, the Northern University of Malaysia, the youngest university in the country (1984) was established to fulfil the manpower needs of the commercial and professional sector of the country. And whilst University of Malaya is maintaining the image of the 'traditional'

* Acting Dean, Faculty of Education, University of Malaya

university, University of Science Malaysia is a university of 'applied sciences'. The Agricultural University and the University of Technology live up to their respective names. The National University of Malaysia was established to fulfil the needs of a 'national' higher institution of learning to meet the demands of the national education system of post-independence.

Table 2. Enrolment in Tertiary Education, 1980-85

				Increase (%)		
	1980	1983	1985	1981-83	1983-85	1980-85
Certificate level	2,603	4,271	5,584	64.1	30.7	114.5
Kuantan Polytechnic	575	970	1,980	68.7	104.1	244.3
Ungku Omar Polytechnic	1,455	1,883	2,039	29.4	8.3	40.1
Batu Pahat Polytechnic	—	120	234	—	95.0	—
Tunku Abdul Rahman College	451	1,061	1,128	135.3	6.3	150.1
MARA Institute of Technology	122	237	203	94.3	-14.3	66.4
Diploma level	13,602	21,341	26,156	56.9	22.6	92.3
Ungku Omar Polytechnic	209	215	226	2.9	5.1	8.1
Tunku Abdul Rahman College	1,752	2,257	2,779	28.8	23.1	58.6
MARA Institute of Technology	7,492	12,125	14,952	61.8	23.3	99.6
University of Agriculture Malaysia	1,681	2,706	3,569	61.0	31.9	112.3
University of Technology Malaysia	2,468	4,038	4,630	63.6	14.7	87.6
Degree level[1]	20,192	29,460	40,328	45.9	36.9	99.7
Tunku Abdul Rahman College	—	111	120	—	8.1	—
MARA Institute of Technology	725	1,149	2,423	58.5	110.9	234.2
University of Malaya	8,045	9,016	9,890	12.1	9.7	22.9
University of Science Malaysia[2]	2,897	5,577	8,862	92.5	58.9	205.9
National University of Malaysia	5,726	8,217	10,220	43.5	24.4	78.5
University of Agriculture Malaysia	1,752	3,294	4,843	88.0	47.0	176.4
University of Technology Malaysia	1,047	1,974	2,842	88.5	44.0	171.4
International Islamic University[3]	—	122	524	—	329.5	—
Northern University of Malaysia	—	—	604	—	—	—
TOTAL	36,397	55,072	72,068	51.3	30.9	98.0

Source: Malaysia, *Mid-Term Review of the Fourth Malaysia Plan, 1981-1985*, p. 355.

Notes: 1 Includes enrollment in post-graduate courses.
2 Includes enrollment in off-campus courses.
3 Excludes enrollment of foreign students.

The progress and development of these universities could be seen in a better light if we look at the overall development programme of the country, especially its education programme. The emphasis on implementation of the education programmes in Malaysia is to steer the education system towards achieving a united and disciplined society as well as meeting the requirements of trained manpower, particularly through the provision of greater educational opportunities for the low-income group and the rural areas. At the tertiary level, courses at various levels were expanded and enrolment increased to meet the shortage of manpower of professional and sub-professional levels. The facilities at the degree level were expanded and improved thereby increasing the student capacity from about 20,000 in 1980 to about 29,000 in 1983. Table 2 indicates enrolment trend in tertiary education, 1980-85.

Malaysia's educational policy, to a large extent, has been guided by social, economic and political considerations. The national policy of eradicating poverty[1] and social restructuring is the overriding objective in achieving national unity among its multi-cultural society. These policies are seen in the rapid expansion of educational facilities for all, especially the low socio-economic group and the Bumiputras to enable them to move with the modern sector of the economy. In planning for the educational needs of the masses at the tertiary level, demand exceeds the places available in the local institutions. The number of Malaysian students enrolled overseas increased from about 40,000 in 1980 to about 58,000 in 1983. The number of students sponsored by the Government increased from 8,700 in 1980 to 12,800 in 1983. But it should be noted that with the increase of high level manpower with diplomas and degrees, the total number of persons with tertiary education only represented two per cent of all persons aged 20 and above.[2]

EDUCATION AND HIGH LEVEL MANPOWER

In looking at the forms of higher education, we should look at the goals of the system of education which is normally related to high level manpower output with the amount of money spent on education amounting to M$3.8 million or 17 per cent of total expenditure for Malaysia in 1985 (see Figure 1) and the cost per student for university education averages from $10,400 to $21,800.[3] It is difficult to compute the cost-effectiveness of university education, but to a certain degree, it is expected that universities should justify the amount of money spent by fulfilling the desired manpower needs of the country.

In trying to fulfil the manpower needs of the country, there is a shift in enrollments

from the Arts and Humanities to the Science and Technological fields. There is a marked decrease in enrollments in the Arts degree courses from 63.5 per cent in 1970 to 47.8 per cent of total enrollments in 1980. In the Science and Technical courses enrollments during the same period increased from 31.4 per cent to 41.6 per cent and 5.1 per cent to 10.6 per cent respectively (see Table 3). The phenomena could also be related to the Supply and Demand of such graduates. Table 4 indicates the trend.

It could be concluded that at the degree level demand exceeds supply in Science and Technical fields, but in the Arts and Humanities, supply exceeds demand by 41 per cent. Table 5 further emphasises this point.

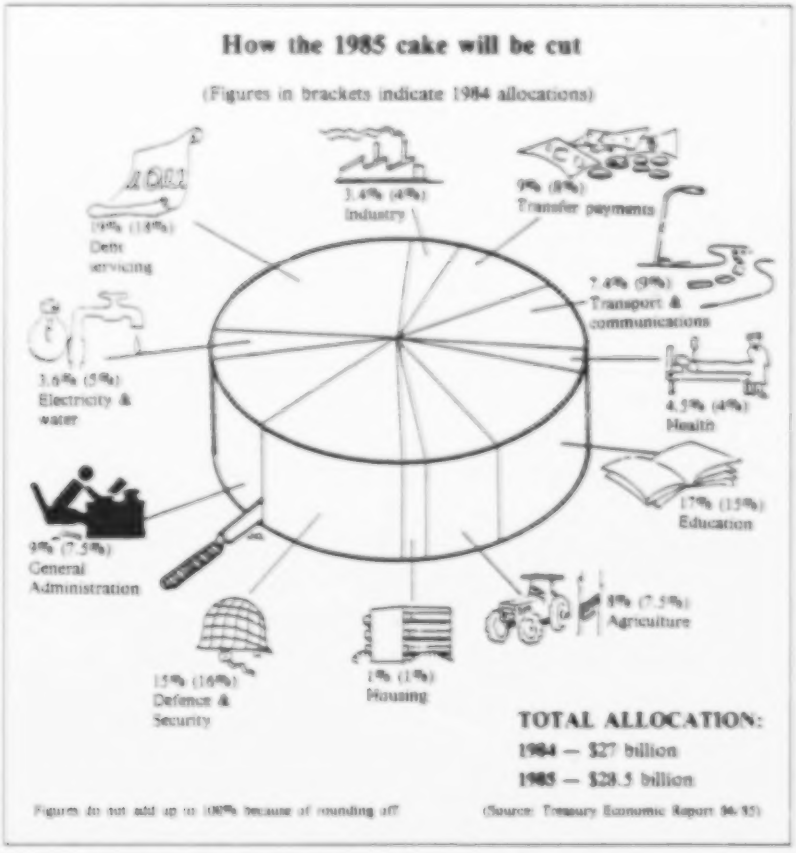


Figure 1. Expenditure Allocations Malaysia 1985

Table 3. Malaysia: Enrollment and Output of Degree and Diploma Holders by Type of Education from Local Higher Education Institutions, 1981-85

Course	Enrollment 1980	Enrollment 1985	Increase 1981-85 (%)	Output 1981	Output 1982	Output 1983	Output 1984	Output 1985	Total output 1981-85
DEGREE									
Arts									
Arts and humanities[1]	6,139	7,047	14.8	1,419	1,610	1,858	1,737	1,759	8,383
Economics and business[2]	3,170	4,740	49.6	992	979	1,121	1,203	1,263	5,518
Sub-total (%)	9,309 (47.8)	11,788 (42.5)	26.6	2,371 (54.7)	2,589 (51.8)	2,979 (50.8)	2,940 (48.8)	3,022 (48.5)	13,901 (50.7)
Science									
Medicine and dentistry	1,409	2,200	56.0	297	280	304	341	341	1,579
Agriculture and related sciences[3]	729	940	29.2	154	199	198	198	198	920
Other sciences[4]	5,961	9,023	51.4	860	1,490	1,912	1,919	1,994	8,160
Sub-total (%)	8,099 (41.6)	12,100 (44.7)	49.4	1,311 (30.3)	1,992 (39.8)	2,310 (39.3)	2,459 (40.8)	2,534 (40.7)	10,656 (38.9)
Technical									
Engineering	1,666	2,640	58.5	473	340	443	458	468	2,187
Architecture and town planning	251	409	62.9	70	63	87	117	131	468
Surveying	162	277	71.0	29	33	31	36	37	192
Other technical[5]	—	29	—	—	—	—	16	14	28
Sub-total (%)	2,079 (10.6)	3,195 (11.7)	32.2	568 (13.1)	481 (9.6)	561 (9.6)	625 (10.4)	670 (10.8)	2,865 (10.4)
TOTAL (%)	19,487 (100.0)	27,058 (100.0)	38.9	4,330 (100.0)	4,990 (100.0)	5,811 (100.0)	6,024 (100.0)	6,226 (100.0)	27,422 (100.0)
DIPLOMA									
Arts									
Arts and Humanities[10]	1,705	3,322	94.9	562	779	977	1,022	1,135	4,475
Economics and business[11]	4,577	9,467	106.8	1,335	1,338	1,550	1,854	2,194	8,217
Sub-total (%)	6,282 (61.2)	12,789 (54.1)	103.7	1,897 (65.2)	2,117 (65.3)	2,533 (69.4)	2,876 (71.2)	3,329 (74.1)	12,692 (69.5)
Science									
Agriculture and related sciences[12]	980	1,417	44.6	304	370	370	370	370	1,834
Other sciences[13]	2,482	3,087	24.4	652	708	699	780	788	3,635
Sub-total (%)	3,462 (33.8)	4,504 (19.1)	30.4	1,006 (23.8)	1,078 (23.2)	1,069 (20.8)	1,150 (20.8)	1,158 (19.2)	5,469 (21.3)
Technical									
Engineering[14]	3,459	4,067	17.5	902	986	1,005	1,007	1,015	4,905
Architecture and town planning	739	953	15.7	137	167	188	200	228	920
Surveying	635	1,017	98.2	173	193	229	269	289	1,152
Other technical[15]	799	402	0.9	93	98	105	105	103	496
Sub-total (%)	5,232 (33.4)	6,341 (26.8)	21.2	1,295 (30.9)	1,434 (31.5)	1,527 (29.4)	1,581 (28.2)	1,617 (26.8)	7,473 (29.2)
TOTAL (%)	14,776 (100.0)	23,644 (100.0)	60.0	4,198 (100.0)	4,629 (100.0)	5,129 (100.0)	5,614 (100.0)	6,044 (100.0)	25,634 (100.0)

1 Includes law, Islamic studies, language, literature and Malay culture, and social sciences.
2 Includes accountancy, business management, resource economics and agri-business.
3 Includes home science technology.
4 Includes pharmacy, applied sciences, environmental studies, food technology and science with education.
5 Property management.
10 Includes law and administration, mass communication, art and design, library science and secretarial studies.
11 Includes accountancy, banking, and hotel management and catering.
12 Includes home science technology.
13 Includes computer studies, applied sciences and mathematics.
14 Includes also building technology, automotive technology and electronic technology.
15 Property management and material technology.

Source: Malaysia, *Fourth Malaysia Plan 1981-1985*, pp. 234—5.

BEST COPY AVAILABLE

Table 4. Demand and Supply of Diploma and Degree Graduates by Type of Education, 1976-80

Course	Demand		Supply		Excess (+) or Shortage (−)	
	Diploma	Degree	Diploma	Degree	Diploma %	Degree %
Arts and Humanities (including Business)	11,205	7,518	6,383	10,575	−43	+41
Science	9,474	8,330	6,337	7,565	−33	−9
Medicine & Dentistry	—	1,050	—	800	—	−24
Agriculture and related sciences	3,200	1,150	2,421	674	−24	−41
Other sciences	6,274	6,130	3,916	6,091	−38	−1
Technical	8,117	3,432	5,316	1,793	−35	−48
Engineering	4,965	2,122	3,909	1,296	−21	−39
Architecture and Town Planning	635	250	881	208	+39	−17
Surveying	252	150	233	37	−8	−75
Other technical	2,325	910	293	252	−87	−72
TOTAL	28,856	19,280	18,036	19,933	−37	+3

Source: Anuar Ali, Toh Kin Woon and Zulkifly Hj. Mustapha, "Unemployment, Educational Planning and Strategies for Employment in Malaysia" in Cheong Kee Cheok, Khoo Siew Mun, R. Thilainathan (eds.), *Malaysia: Some Contemporary Issues in Socioeconomic Development*, Persatuan Ekonomi Malaysia, 1979, p. 291.

Table 5. Malaysia: Estimated Demand for and Supply of Diploma and Degree Graduates by Broad Field of Specialization, 1981-85

Course	*Demand, 1981-85*		*Supply, 1981-85*[1]		*Excess(+) or Shortage(−)* 1981-85	
	Diploma	Degree	Diploma	Degree	Diploma	Degree
Arts and humanities	8,924	11,614	11,745	13,837	+2,821	+2,223
Science						
Medicine	—	3,605	—	1,236	—	−2,369
Dentistry	—	651	—	195	—	−456
Other sciences	4,177	5,855	6,204	8,517	+2,027	+2,662
Technical	12,081	5,661	7,962	2,914	−4,119	−2,747

Source: *Mid-Term Review of the Fourth Malaysia Plan, p. 143*

BEST COPY AVAILABLE

MEETING THE NEEDS OF THE COUNTRY

Overall, we could see the development of higher education in Malaysia as planned growth within the framework of overall national, social and political goals and the focus is in the roles and functions of higher education in meeting the manpower needs of the country. We could also see within the last twenty years a rapid expansion, both in number of universities and student enrolment. But having seen the growth and development, a number of questions come to mind. Are the universities, whilst expanding their intake and courses offered, meeting the needs of the country, are they producing degree holders who are able to contribute effectively to the nation? Are they offering courses relevant to the immediate and future needs of the country? And whilst expending and trying to meet the demands of the society, are universities maintaining the standards befitting university education and sensitive to the culture and aspirations of the population?

I will not try to pretend to be able to answer these questions, but I could say with confidence that Malaysian universities are sensitive to the needs and aspirations of the nation. But is must be pointed out that being sensitive does not really correlate with realities facing the universities.

(a) Social Demands

Due to pressure created by social demands for higher education, we have seen the rapid university development during the last twenty years. As university education is often equated with jobs and a step towards higher social mobility, there has been a scramble for the limited places in the universities. As we have seen, our universities by student population are relatively small in size. Our biggest and oldest university, the University of Malaya, has a total student enrollment of just over 8,000. Every year the number of qualified applicants for admission into the university exceeds the number of places available. The number of students pursuing studies at institutions of higher learning overseas has increased from 40,000 in 1980 to 58,000 in 1983. With this great demand for higher education why have the universities or government not expanded the present facilities for a bigger intake of students, as the government itself has increased the number of sponsored students sent overseas from 8,700 in 1980 to 12,800 in 1983? As the student population increases at the primary and secondary level, the social demand for university education would increase. How do the universities cope with this social pressure?

The other pressure that the universities are facing is in the area of specialization or courses offered. Question of relevance to jobs of courses offered, credentialling and

assessment procedures are often asked of university education. Of course universities would like to produce graduates who are 'useful' for the job market, and at the same time ensure the quality of their "products", but sometimes quality and quantity do not necessarily meet. With *quantitive* expansion, it signals certain structural changes which must focus on *qualitative* aspects in conjunction with curricular and pedagogical changes. It is easy enough to create another 5,000 places (after all, teaching could also be carried out under the shade of trees!), but could the universities cope with this increase with the present facilities in the curricular and pedagogical aspects whilst ensuring a certain level of quality?

(b) Quality vs. Quantity

It is inevitable and necessary that expansion of higher education keep pace with the rapid process of industrial and social restructuring. During the process of keeping up with numbers and social demands it is apparent that the pattern and structure of education must change.

Universities could not concentrate on excellence in academic and research work without a shift in emphasis. For Malaysia, there is a marked shift from the Arts, Humanities and Social Sciences towards the Technical, Engineering Fields and Applied Sciences. This is well so as Malaysia needs the knowledge to transfer technology and develop its natural resources to the optimum level. Malaysian universities could not indulge in the luxury of research and academic pursuit for its own sake, but should explore areas where the country could benefit directly from such pursuit, and at the same time maintain its goal of excellence. The implication here is that universities need to take a fresh look at their curricula to include skills and essential knowledge required by the various sectors of the economy.

Another area not to be neglected is the pedagogical aspects where the process of learning and teaching is important as the skill and knowledge itself. The concept of total learning/teaching process is important to ensure an effective means of transmitting learning skills. The training of university teachers is vital. To maximize the utilization of academic staff time by increasing teaching load or increasing student:teacher ratio may solve the problem of numbers, but does this justify the end product? With the increasing number of universities, the demand for university teachers increases too. Are we getting the right people for the job, is a basic question being asked. Are the newer teachers equipped with the right mental attitude and academic excellence to perform effectively as a university teacher? This is where I feel that university teachers with academic excellence alone will not ensure the pedagogical

skills to impart that knowledge to students. Again, his training in pedagogical skills is vital to maintain the quality of university outputs.

(c) Universities and the Curricula

What should be taught in universities? Universities in Malaysia seem to be very well-defined in their roles as far as courses are concerned, as seen earlier. But a certain amount of duplication is unavoidable, though duplication is not necessary in a developing country like Malaysia with its limited resources. In developing courses and programmes of study, universities should not only reflect the economic and political needs of the country but should try to blend its curricula with the local culture. It should not exist as a separate entity from the society of its existence. The Northern University of Malaysia, in developing its curricula, is looking into programmes that will enhance the cottage industry of the area it is situated in, taking into account the culture and economic climate of the society. According to the Vice-Chancellor of the University, it is the duty of the university to offer programmes that benefit the locals directly and at the same time open new avenues for academic pursuit. The University of Malaya has started programmes in the Japanese Language (1983) to prepare students for entrance examination to universities in Japan, besides its extensive programme in English language. This is to meet the demands of the government's 'Look-East' policy. The other universities are also offering courses in areas of needs.

In developing these programmes universities face the problem of manpower. Are there enough university teachers to fill these needs? A Ph.D. does not ensure an effective university teacher. It is in this area that universities need to improve to ensure quality in its programmes.

WHAT FUTURE

We have seen the progress, development and dilemmas facing universities in Malaysia. If we look into the future we could see the conflict arising from what universities want to do, i.e. maintaining its academic and research excellence, and fulfilling the social and economic demands of the country. Universities should not abandon its ideals but should strive for a balance between the two. There should be excellence in the field of research and teaching as this will ensure the quality of university life and society in general. But it should also pursue research and conduct teaching programmes in courses and areas that will benefit the country. Of course, I will not deny a university professor pursuing research on the life habit of a pre-historic mammal, but I will question the benefit the community in general will gain from such

a study. I would prefer to see a professor pursue studies and research activities in the field of improving work output or performance of factory workers as this will give a more direct application to society. Of course, in all cases academic excellence in research should be maintained.

The universities in Malaysia are basically offering courses and programmes at the undergraduate level. Only University of Malaya has a large population of postgraduate students and conducts planned research activities and teaching at that level. Even then, the number of postgraduate students enrolled (1984/85) totalled 576 compared to undergraduates numbering 7,879. The trend for the University of Malaya is, whilst strengthening the undergraduate programme, to increase the enrolment at postgraduate level. The ability of the university in producing qualified graduates (with a first degree) should be strengthened by research and postgraduate work to ensure the quality desired. It is at this level of study that more specialization could take place as the social and economic structure of the country needs a large number of specialists in the not too distant future.

As we advance into modern technology and the rapid growth of industry, disciplines in the area of applied sciences are of vital importance. We have been producing graduates in the pure sciences at the undergraduate level to fill the needs for scientists. But the job market for pure science graduates is decreasing and there is a surplus now of such graduates in the country. Our industry needs applied scientists who are able to transfer technology and knowledge to their jobs. University of Technology Malaysia and University of Agriculture Malaysia, and to some extent University of Science Malaysia are fulfilling these needs. Maybe the other traditional universities such as University of Malaya and the National University Malaysia should look afresh at their curricula. There is a place for social scientists in the development of the country. But these social scientists should be able to grasp basic technological developments in the field of science. I could see the future where social scientists is well aquainted with the scientific and likewise technological scientists be sensitive to understand the nature of human behaviour. Unless we see the balance between the two, then planning in the area of development for the country will not fulfil the required need. We do not like to see a society where the rule of the game is material development without regards to human development too. The quality of life should not be gauged in terms of just material wealth but also to spiritual and aesthetic values attached to it. We should not try to create a society of thinkers who are not sensitive to things and finesse in life. True, Western civilization has brought about a tremendous

amount of technology that makes life easier but with it too comes various complexities which might not be suitable for the Malaysian society. This is where the universities in the country, as I said earlier, should balance its courses not only between the needs of society and its academic excellence but also in the sensitivity and awareness of its culture and tradition of the society.

References

1. Malaysia, *Fourth Malaysia Plan 1981-1985*, Kuala Lumpur: National Printing Department, 1981.
2. Malaysia, *Mid-Term Review of the Fourth Malaysia Plan, 1981-1985*, Kuala Lumpur: National Printing Department, 1984.
3. Khoo Teik Huat, *General Report of the Population Census 1980*, Vol. I, Kuala Lumpur: Department of Statistics.
4. Yip Yat Hoong, "The cost of university education in Malaysia", *RIHED Bulletin*, Jan.—March, 1983,
5. Jasbir Sarjit Singh, "Planning for Change: The Malaysian Education System", paper presented at the Manpower Planning and Industrialisation Workshop, Kuala Lumpur: 6-8 December, 1984.

Note

1) Poverty in the Malaysian context is relative in the sense that no one could be said to be starving or deprived of food, basic clothing or shelter, but as in comparison to others in the Society.
2) Khoo Teik Huat, *General Report of the Population Census 1980*, Vol. 1, Kuala Lumpur: Department of Statistics, p. 57.
3) Yip Yat Hoong, "The cost of university education in Malaysia", *RIHED Bulletin*, Jan.—March, 1983.

« COMMENTS ON PROFESSOR AZMAN'S PAPER »

Yoshio Gondoh*

First of all, I should like to express my hearty thanks to Dr. Azman for his well balanced and to-the-point report on "The Prospects and Problems in Malaysian Higher Education Expansion". Through this report we were able to get both useful and relevant data and a vivid image of the future prospects of Malaysian higher education. This excellent presentation stimulated my desire to learn more about Malaysian higher education. I would like to have a more detailed explanation of the following points as expressed in my comments below.

(1) As for the background of higher education in Malaysia, one of the most important and relevant factors seems to be the so-called Bumiputra Policy. As Dr. Azman has pointed out, Malaysia's educational policy, to a large extent, has been guided by social, economic and political considerations. And the national policy of eradicating poverty and restructuring society seems to be the overriding objective in achieving national unity among various groups in its multi-cultural society.

But it seems obvious to me that the emphasis or focus of this national policy is to improve the economic status of the Bumiputras (the native Malays). Therefore, it is most important, in fact indispensable for us to put the problems of Malaysian higher education in the context of Bumiputra policy. It would be illuminating if we could get more information on the facts of this Bumiputra policy in higher education, for example, the policy for scholarship distribution, recruitment policy and selection procedures etc.

(2) One of the most striking features of higher education in Malaysia is the tremendous numbers of students studying abroad. At present about sixty thousand students are studying abroad, while thirty thousand students are studying at local universities and other higher institutions. These numbers are important when we try to understand the overall situation and problems of Malaysian higher education. It is thus important to examine the implications of such a large number of talented students studying abroad. If students are academically gifted they will try to get a chance

* Dean, Faculty of Education, Kyushu University

to go abroad and therefore local universities are suffering from the condition of being "milked off" and having a lower prestige than foreign universities. It is thus important to consider the reasons or factors underlying such a policy.

(3) Every year about fifty thousand students graduate from faculties of engineering at Japanese universities. This fact points to the needs of Japan's highly developed industrial sector for a great amount of educated man-power. When I visited the faculty of technology at the University of Malaya, I found that the number of annual entrants is about two hundred and there are only three full professors. As Dr. Azman concluded in the section on education and high level manpower in his report, "at the degree level, demand exceeds supply in the science-related and technical fields" and "the number of postgraduate students enrolled (1984-1985) totalled 576 at the University of Malaya". It seems to me, that it is most urgent to increase the number of faculty members teaching in science and technology fields. One solution would be recruitment of foreign professors instead of sending students abroad.

HIGHER EDUCATION EXPANSION IN THAILAND: PROCESS, PROBLEMS AND PROSPECTS

Prasarn Malakul*

I. Introduction

A current estimate of population in Thailand puts it at the 50-million mark of which more than 50 per cent are over 15 years of age. The annual rate of population growth is approximately 2 per cent and 50 per cent of the people live in the country. Majority of the population consists of Thai nationals and Buddhists, while the Chinese, Muslims and Christians constitute important minority groups. The Thai language is the dominant and official medium of communication with those of English and Chinese unofficially used as second languages.

Education as a governmental function in Thailand can be dated only from the last part of the 19th century. Until then, education was offered by Buddhist monasteries, the Royal court and certain households to a very small portion of the population. The reign of King Mongkut (1851-1865) saw the turning point of modernization in Thailand and the growth of educational influence. The modernization policy was further pursued by King Chulalongkorn (1868-1910) who, realizing the need for better trained personnel for royal and government services, encouraged the establishment of schools both in the Royal court and outside the palace. The Department of Education was founded in 1887 with the responsibility of taking full charge of education for the entire country and became a full-fledged Ministry in 1892. The early 20th century thus witnessed many developments in education in Thailand. In 1977, the structure of the school system was changed from the old system of 4:3:3:2 to the 6:3:3 system. The Thai educational system presently consists of 6 year primary, 3 years lower secondary, 3 years of upper secondary education prior to higher education from which 4 to 6 years of higher education are required at the bachelors' degree level. In the year 1983, 99.4 per cent of children between the age of seven to twelve attended primary schools. About 43 per cent of primary school graduates received secondary level education and approximately 15 per cent furthered their studies in higher education among which half of them are in the open admission universities.

* Dean, Faculty of Education, Chulalongkorn University

II. Development and Expansion of Higher Education

The development of Thai higher education should be differentiated into three phases. The first phase was the period prior to 1960 which might be characterized as the training of specialized officials for government services. The first institution in the form of university, established in 1917, was potentially a consolidation of a number of existing specialized training schools into four faculties, namely, Arts and Sciences, Medicine, Engineering and Political Sciences. This first university was named Chulalongkorn University in memory and honor of King Rama V whose reign had initiated great stride in public education. After 67 years, Chulalongkorn University presently constitutes 15 Faculties, a graduate School, 7 Institutes and 2 affiliated institutions.

Since the revolution in 1932, Thailand has been governed by a democracy with the Monarch as Head of State. The constitutional form of government created a demand for another type of institution which was met with the establishment of a second university entitled the University of Moral and Political Science in 1933. This university was initially an 'academic market' offering courses in Law, Politics, Economics and related social sciences to students with no entrance examination. The name of this second university was subsequently changed in 1952 to Thammasat University together with the adoption of the closed university system in terms of entry and class attendance.

In the early 1940's, three more universities specializing in medicine, agriculture and fine arts were set up to produce officials according to the need of their corresponding ministries.

It should be noted that in this first phase of expansion in higher education, all the five universities were situated in the Bangkok metropolitan area and under the supervision of many government ministries. The establishment of a number of colleges of education in the 1950's was also authorized by the Ministry of Education.

The second period started from the introduction of the First National Economic Development Plan (1961-1966) up to the end of the Second Plan (1967-1971). During this period, Thai government policy had been directed towards three-fold aims, namely, the decentralization of higher education to provincial areas, the provision of more open access at higher education level and the projection of shortage in supply of high-level manpower to meet rapid growth of the country. The achievements of higher education in this era included the creation of regional higher learning institutions, the promulgation of the Private College Act and the establishment of the

first open admission university.

The third period from the Third Plan (1972-1976) up to the first part of the Fifth Plan (1982-1984) should be designated as a great leap in Thai higher education expansion. This expansion has been accompanied by a good deal of confusion as well a a search for identity and solution. While attempts have been made at planning higher education according to certain economic formulae and national development plans, the public demand and political pressure have led to incessant provision of more place in higher learning institutions. The establishment of the distance learning Sukhothai Thammathirat University, together with the upgrading of a number of government and private colleges into degree granting institutions have eventually created the state of overwhelming expansion of higher education in Thailand. It should, however, be noted that there has been also vigorous attempts at the reformation and revitalization of tertiary education in terms of objectives, function, governance and coordination.

The following section will be an overall sketch of the current situation of higher education in Thailand with reference to number and types of institutions, location, enrolments and fields of study, academic staff and expenditures.

1. Number and types of higher education institutions

The system of higher education in Thailand embraces various types of institutions. It includes universities, institutes, colleges, and specialized or professional training institutions. To this date, there are 412 institutions of which 285 are government and 127 private institutions. Based on source of control, Thai higher education institutions can be classified into the following three categories.

1) Universities, institutes and colleges under the jurisdiction of the Ministry of University Affairs. This category consists of 14 government closed admission universities with 21 campuses, 2 open universities with 3 campuses, 3 institutes with 5 campuses, 4 private universities and 10 private colleges.

Government universities are mostly comprehensive institutions offering programs in all fields of study at both undergraduate and graduate levels. Several Ph.D. programs are also conducted by four universities. Government institutes offer programs in specific fields, namely, graduate program in public administration, agriculture, technology and related sciences. They generally undertake more research and training activities than other institutions.

Most of the programs offered at the private universities and colleges are degree and diploma courses oriented towards business administration, humanities, law, some

specific areas of science, technology, and health sciences.

2) Colleges under the control of the Ministry of Education. This group includes 214 government colleges consisting of 118 vocational and technical colleges, 3 commercial colleges, 33 agricultural colleges, 36 colleges of teacher education, 17 physical education colleges, 6 dramatic arts colleges and 1 fine arts college. Also included in this category are 109 private vocational and technical colleges. The mission of institutions in this category is to provide professional training mostly at the baccalaureate level but also at the lower and higher certificate levels.

3) Specialized or professional training institutions under the supervision of other ministries, government and private organizations. These institutions are established with specific mission for special groups of students. Under this category are 7 military and police academies, 1 military medical college, 24 nursing colleges, 11 post-secondary education institutions, 2 Buddhist colleges, and 1 international institute (the Asian Institute of Technology).

2. Location of higher education institutions

Among the total number of 412 institutions of higher education, 190 institutions or 46 per cent of them are located in Bangkok and the central region of the country. As for institutions under the Ministry of University Affairs, 72 per cent of government and 78 per cent of private institutions are situated in Bangkok. The geographical dispersion of institutions under the Ministry of Education and other organizations are broader with around 43 per cent in Bangkok and 57 per cent in other regions. They are, again, located either in or near urban centers. The geographical distribution in terms of number and types of higher education institutions is shown in Table 1.

Table 1. Distribution of Thai Higher Education Institutions by Regions (1983)

Regions	Ministry of University Affairs		Ministry of Education		Specialized institutions under other ministries and organizations	Total
	Govn. univ. and institutes	Private univ. and colleges	Govn. colleges	Private colleges		
Central						
Bangkok	17	9	36	17	24	103
Outside	4	2	49	24	8	87
North	3	1	37	20	5	76
Northeast	2	2	48	30	5	87
South	3	—	34	18	4	59
Total	29	14	214	109	46	412

Source: National Education Commission, 1984

3. Enrollments and fields of study

Student admission of higher learning institutions showed a sharp increase during the past two decades. The number of enrollment as shown in Table 2 indicate the total 94,102, 240,665, 553,697 and 2,148,086 representing the increase of 155.75 per cent, 130,07 per cent, and 287.95 per cent in the Second, Third and Fourth National Development Plan respectively.

Table 2. Number of Enrollment in Higher Education Institutions During Four National Development Plans

Institutions	First Plan 1961-1966	Second Plan 1967-1971	Third Plan 1972-1976	Fourth Plan 1977-1981
	No. of students	No. of students	No. of students	No. of students
Government	94,120	236,089	506,763	2,029,084
Closed admission	94,102	236,089	370,740	440,529
Open admission	—	—	136,023	1,588,555
-Ramkhamhaeng	—	—	136,023	1,534,379
-STOU	—	—	—	54,176
Private	—	4,576	46,934	119,002
Total	94,102	240,665	553,697	2,148,086

Source : National Education Commission, 1984

Table 3. Number of Change Percentage of Undergraduate Enrollment in Government Higher Education Institutions by Fields of Study During Three National Development Plans

	Second Plan 1967-1971	Third Plan 1972-1976		Fourth Plan 1977-1981	
	No. of students	No. of students	% ±	No. of students	% ±
1. Agriculture	15,427	17,063	10.60	23,616	38.40
2. Law	17,616	64,448	265.85	570,640	785.43
3. Health Sciences	29,045	38,537	32.68	46,608	20.94
4. Humanities	14,963	37,689	151.88	97,056	157.52
5. Fine Arts	4,343	6,401	47.39	6,309	- 1.44
6. Science	11,009	30,913	180.80	77,555	150.47
7. Engineering	18,477	32,769	177.35	39,149	11.95
8. Education	51,226	140,598	174.25	307,621	218.79
9. Social Sciences	57,163	103,664	81.35	805,592	677.12
10. Others	—	—	—	5,848	—
Total	219,269	472,082	115.30	1,979,994	419.42

Source : National Education Commission, 1984

With respect to the field of study in higher education, the data in Table 3 shows a steadily high increase in such fields as law, social sciences, education and humanities. On the other hand, the number of students in health sciences, engineering and agriculture shows small change percentage.

4. Academic staff

In accordance with the rapid expansion in higher education, the number of academic staff highly rose from 3,634 in 1966 to 7,619, 13,997 and 16,326 in 1971, 1976 and 1981 respectively. This represents increasing percentage of 123.50, 73.12 and 23.67 throughout these periods as shown in Table 4.

Table 4. Number and Change Percentage of Academic Staff in Higher Education Institutions by Four Periods of National Development Plan

Institutions	1966	1971		1976		1981	
	No.	No.	% ±	No.	% ±	No.	% ±
Government	3,634	7,219	98.65	12,979	79.79	14,402	10.96
Closed admission	3,634	7,219	98.65	12,276	79.79	13,314	8.46
Permanent	2,357	6,268	123.50	9,120	73.12	11,281	23.67
Special	1,277	1,446	13.23	1,753	21.23	2,033	15.96
Foreign staff		178	—	207		—	
Others		327	—	1,196		—	
Open admission				703	—	1,088	54.77
Permanent				528	—	760	43.94
Special				114	—	328	187.72
Foreign staff				8	—	—	
Others				53	—	—	
Private		400	—	1,018	154.50	1,924	88.98
Permanent		152	—	425	179.61	1,044	145.65
Special		248	—	593	139.11	880	48.38
Foreign staff		—	—	—	—	—	
Others		—	—	—	—	—	

Source: National Education Commission, 1985

Together with the increased quantity of academic staff, the quality trend also shows a gradual acceleration. The ratio of teaching staff holding doctoral, master's and bachelor's degrees in the closed admission universities rose from 0.9:4.0:5.1 in 1966 to 2.0:5.7:2.3 in 1981, which is close to the standard ratio of 2.0:5.5:2.5 set in the Fourth Plan target. But for the private institutions, the ratio only slightly increased from 0.3:1.4:8.3 in 1971 to 0.3:3.3:6.4 in 1981.

Another interesting aspect is the ratio of teaching staff and students. For the

government closed admission institutions, the ratio was 1:7:6, 1:11.7, 1:8.8 in 1961, 1971, 1976 and 1981 respectively. While the ratio of private institutions showed different patterns of 1:17, 1:33 and 1:35 in 1971, 1976 and 1981. The ratio of teaching staff and students in the open universities, parallel to the institutional form and policy, indicated 1:157.7 and 1:754.4 in 1976 and 1981 respectively.

5. Finance of higher education

During the past decades, the Thai government notably increased its investment in education. The budget allotted to education rose from 16.9 per cent of the total government expenditures in the First Plan period to 20.4 per cent in the Fourth Plan. This accounted for 3.43 per cent of GDP during the same period. In the first part of the Fifth Plan (1982-1984), the percentage was slightly increased to 3.87.

For the financing of higher education, the government budget allocation increased from 1,830 million baht (20 baht = 1 US $) in 1977 to 3,506 million baht in 1981 with an average increase of around 18 per cent per year.

From the expenditures of higher education institutions as shown in Table 5, the increase of government institutions was around 61 per cent in the Third Plan and more than 150 per cent in the Fourth Plan. But for the private institutions, the increasing rate in the Third Plan was exceptionally impressive of more than 800 per cent, while the rate was down to a minus 21 per cent in the Fourth Plan. This fluctuation of expenditures was actually caused by the investment in the establishment of additional private colleges. The expenditure ratio of government and private institutions was 97:3, 86:17 and 97:3 for the Second, Third and Fourth Plan respectively.

Table 5. Expenditures of Higher Education Institutions During Three Periods

(20 baht = 1 US $)

Institutions/Expenditure (baht)	Second Plan 1967-1971	Third Plan 1972-1976	Fourth Plan 1977-1981
Government institutions	3,162.615	5,113.109	13,058.515
Recurrent	1,779.525	3,930.626	8,528.663
Capital	1,363.090	1,182.483	4,509.852
Private	93.091	846.788	662.743
Recurrent	21.178	157.849	553.942
Capital	71.913	688.939	108.801
Total (Government + Private)	3,255.706	5,959.897	13,701.258
Recurrent	1,820.703	4,088.475	9,082.605
Capital	1,435.003	1,871.422	4,618.653

Source: National Education Commission, 1985

As for the per head cost of students, the estimation showed the rate of 7,625, 10,285 and 18,640 baht for the government closed admission institutions, 6,492, 3,365 and 4,655 baht for private institutions from the Second to the Fourth Plan periods respectively. The estimation during the Third and Fourth Plan periods presented the per head cost of 870 and 180 baht for the open universities.

III. Significant Problems of Higher Education Expansion

From the above elucidation, it is evident that after a relatively slow but steady evolution in the early period, the expansion has been remarkably impressive during the past two decades. Several factors contributing to this fast expansion have been assessed, namely, the rapid population growth, people's value and attitude towards higher education, the government policy in building up human capital and educated manpower, the national accelerated rural development programmes, the considerable high rate of return from investment in higher education, and the rising unemployment situation. It is, however, suspected that many of these forces may be operating together in creating this striking acceleration of enrollment.

In the course of this rapid expansion of higher education, several problems have been activated. Some of the more crucial ones are presented in the following section including the mismatch of demand and supply, the dilemma of quantity and quality, the quality of academic staff, budget and resource allocations, and coordination.

1. The mismatch of demand and supply

It is evident that higher education institutions tend to produce more graduates in the less demanding fields such as social sciences, law education and humanities. There is a much greater supply of graduates in these fields than that needed to meet the demand of the labor market, resulting in the growing rate of educated unemployment and underemployment. On the other hand, there are fewer graduates in the fields of health sciences, engineering and technology than the number necessary to meet the needs of the country. Table 6 shows the overall rising number of the educated unemployment from 9,900 persons in 1971 to 37,000 in 1977 and 58,000 by 1981. Although this number represents only a small fraction of total unemployment in Thailand (605,700 in 1977 and 644,000 in 1981), its fast rising trend which is expected to continue for a number of years, should raise serious concern about its potential political and social consequences as well as the wastage of economic resources through investment in higher education.

Furthermore, data from the National Statistical Office indicates that in 1971

Table 6. Number of Educated Unemployed 1971-1981

Year	Vocational	University	Technical	Teacher Training	Total
1971	6,840	1,200	1,460	490	9,990
1977	14,900	6,200	2,600	13,300	37,000
1978	15,700	6,900	2,800	16,100	41,500
1979	23,600	5,900	3,800	15,800	49,100
1980	23,800	6,900	4,300	12,500	47,500
1981	28,400	15,300	5,700	8,800	58,200

Source: National Statistical Office *Labour Force Survey*

about 2,700 out of 135,100 university graduates were engaged in jobs which did not require their training qualifications, the number rose substantially in 1980 to 10,111 from 172,800 graduates in fields where market absorption is already saturated are being paid less than the starting salary of the public sector which is already quite low (2,765 baht = US $ 100). Although it is not possible to link all educational qualifications to job requirements, especially in the private sector, the fact that the higher level pre-career training may not effectively fit in with job performances an future demand in the labor market as well as the social needs should be seriously analyzed in order to solve the critical problems of optimal resource utilization.

2. The dilemma of quantity and quality

It is also quite paradoxical that while there arises a substantial surplus of educated manpower in recent years, there occurs shortage of several categories of middle and high level workers. A survey of firms by the Manpower Planning Division of the National Economic and Social Development Board in early 1983 indicates a number of vacancies which firms found difficult to fill. These vacancies range from mechanical, electrical and electronic engineers, accountants, computer scientists, plant mechanics, draftman, technical sales personnel, etc. But general data confirm the surplus of graduates and a rather stable unemployed percentage of outputs in these fields. This implies that shortage of several categories of educated manpower may be associated with quality problems, rather than quantity. The fact that there is at present little cooperation between users and producers of educated manpower in Thailand and a slow adjustment process of educational and training institutions to labor market information due to complexity of administrative structure in educational institutions, the problem of scarcity amidst the plenty may continue to rise in the course of further rapid economic change.

3. The quality of academic staff

In the course of rapid expansion, one of the major problems is the quality of academic staff and instruction. Based on data on education levels of the academic staff of higher education institutions as mentioned in the previous section it must be concluded that staff qualifications are still lower than the minimum standard. The lack of qualified staff is even more serious in the fields of health sciences, science and technology, engineering and agriculture. Higher education institutions in the provincial areas have continuously faced the crucial problem of recruiting qualified academic staff on a permanent basis.

Another alarming statistic is the proportion of special and permanent staff as presented in Table 4. Because of the shortage of teaching staff in some fields, government and private institutions have to depend on special lecturers drawn from outside their institutions. In government closed admission universities, the percentage is declining from 21.23 per cent in 1976 to 15.96 per cent in 1981. However, this still remains a problem to be solved. In private institutions, this problem is even more prominent as special teaching personnel constitute more than 50 per cent of the total teaching staff. Existing plans to further expansion of private institutions would inevitably face an increasing gap of the permanent and special personnel ratio.

In consequence, further expansion of higher education in Thailand needs to give this issue a serious concern, since the unqualified academic staff and ineffective instruction eventually produce underemployment. The situation represents a vicious cycle in Thai higher education.

4. Budget and resource allocations

During the Fourth Plan, the allocation of government budget to the higher education sector accounted for about 0.4 percent of GDP each year. From the macro point of view, it should be kept in mind that the larger the resources allocated to the higher education level, the smaller will be the amount left available to the rest. The higher education sector has grown bigger in the past at the expense of the shrinkage of the other levels, particularly the primary level. Almost all of the resources contributed to the growth of the higher education sector have been from the government budget. The revenue from tuition and related fees constitutes only 8.98 percent of total revenue of the closed admission universities. According to the policy in the Fifth Plan, the number of students to be admitted into the closed admission university is maintained relatively at the current level. With increasing cost of production and low tuition fees policy, the financial burden of supporting the closed admission universities grows heavier.

The limited funds and resources have led to several hindrances in the effective fulfillment of higher education functions as expected by the country. The shortages of efficient personnel, educational materials and equipments for facilitating instruction, have inevitably added problems to the situation of higher education in this country.

5. Coordination

Generalization with regard to coordination of higher education in Thailand leads to five patterns, namely, a coordinating agency, a governing-coordinating agency, parental department, voluntary groups, and other government agencies. The three other government agencies playing major roles in controlling the planning and financial matters of higher education institutions are the Budget Bureau, the National Economic and Social Development Board, and the Office of the National Education Commission.

After reviewing the situation, it is evident that higher education in Thailand has evolved into many sub-systems. Each of these has its own problems in coordination. The main problem of university coordination is that it is actually an over-coordinating system with many government regulating agencies performing their rightful function, treating universities in the same fashion as other government bodies. For government colleges, there are also many subsystems of control by parental departments and other authorized agencies. All government universities and colleges are, therefore, in the same deploring situation, they all have to follow the many rigid rules and regulations of government bureaucracy. The present administrative structure and management provide little autonomy and flexibility in internal operations which are essential for the task and function of higher education. As a result of the lack of proper coordinating system, it becomes difficult for higher education institutions to formulate of policies or implement national and institutional planning. This situation has led to many critical problems such as wastages in the producing of graduates, duplication of programs and inadequate use of resources. A promising future of higher education expansion, hence, appears to be heavily based on the improved effectiveness of the system of coordination.

IV. Prospect for Future Development

The demand for higher education in Thailand has been continuously increasing, and higher education institutions have to be responsive to both individual and national needs. Because of limited resources and vital needs for optimal use of

resources, the process and outcomes of higher education institutions should be consistent with the prescribed objectives and plan of the country. Government planning is generally accepted for effective management of institutions of higher learning, the plan does provide directions for the growth and development of higher education especially in a macro view. Most of the existing problems nonetheless, are linked to the inadequate realization and implementation of the national plans. The often mentioned causes of this situation are the shortage of information, qualified personnel, and financial resources. In consequence, the long-term five-year plans formulated at the national level often lack operational plan to annual implementations and planning evaluation also tends to be ad hoc rather than a continuous process. All of these factors contributed to the discrepancies between the expected and actual outcomes.

In trying to solve problems related to the effectiveness and efficiency of higher education as well as to be responsive to the growing demand of the people, the Thai government's policies on tertiary education in the Fifth National Education Development Plan (1982-1986) which would be mostly carried on to the Sixth Plan period (1987-1991) put priorities on a number of processes and measures to cope with the dilemma of quantity and quality as follows:

1. To improve the quality and to raise the standards of education at the tertiary level by:

   1) Raising the quality and efficiency of teaching, by promoting the publication of textbooks in the Thai language, by providing modern equipments and materials that are adequate to provide educational services and to do research, and by improving the administrative system.
   2) Improving curricula, content and the learning teaching process in order to provide proper balance between theory and practice. It is also to set up short-term and long-term curricula in various forms to meet society's needs.
   3) Supporting research to promote the advancement of academic knowledge and to apply research results for the development of the country, especially research in energy and appropriate technology for rural development.

2. To provide measures to guarantee equal educational opportunities at the tertiary level along with increasing the number of graduates in the fields and professions that are in high demand, especially personnel in the fields of medicine and public health.

This policy aims to provide opportunities for higher education institutions, open universities and private higher education institutions. The policy explicitly states the

measures and support to encourage private higher education institutions to expand education in the area for which they are competent, while the government institutions are not encouraged to offer programs in similar fields to those of private institutions.

3. To expand academic services for the society by stressing academic knowledge diffusion, training, and continuing education in various forms. University students are particularly encouraged to participate more in extra-curricular activities and services to the community.

4. To encourage higher education institutions to perform more activities for the promotion and conservation of the national arts and culture by stressing moral value together with the unique characteristics of the nation.

5. To promote the cooperation among higher education institutions and other outside agencies for the most efficient utilization of resources. Such a policy is also meant to find ways and means to involve more efforts from the private sector in sharing the responsibility for the expansion of higher education.

Along with these prescribed policies, the council of Ministers appointed a Committee for long-term Planning of Higher Education. Their missions include the evaluation of status, achievement of potentiality of universities and equivalent institutions, to analyze and forecast long-term demands in higher education, to formulate long-range planning for higher education in the next 15 years in terms of demands, feasibility, expansion, and supplied resources. In order to have reliable and valid information for planning and decision making, the Committee has already commissioned nine research projects under the following topics:

1. The present status of higher education in Thailand.
2. The social demand in degree education between 1980—2000.
3. The manpower demand in professional education between 1980—2000.
4. The curriculum and instruction in higher education.
5. The achievement of research, public services, and cultural preservation in universities.
6. Staff development in universities.
7. The university expenditures.
8. The structure and management of the systems of higher education in Thailand.
9. The university mapping in Thailand.

After reviewing all the significant features of future perspectives, it should be reasonably concluded that the prospects of higher education in Thailand appear to

be very promising both in terms of quantity and quality. There has been no other time in the history of educational development in Thailand when higher education has received such serious concern and pooled effort and expertise from top experts of the country. Further access and expansion of educational opportunities will apparently be directed towards private institutions and open universities. The standards and missions for the production of needed manpower and advancement of knowledge will be systematically managed and coordinated in the closed admission institutions. The establishment of additional government institutions will, therefore, not be encouraged, while the effort will be vigorously geared towards the consolidation of existing colleges and institutions at suitable geographical locations. The trends of the future higher education in Thailand will be evidently stressed on the optimal use of resources and insurance of good balance between quantity and quality.

References

1) Office of the National Education Commission. A Research Report on Higher Education System: A Case Study of Thailand. Bangkok, Thailand, 1977.
2) Office of the National Education Commission. An Evaluative Report on the State of Education Management and the Evaluation of the Fifth National Education Development Plan (1982-1986), Higher Education Level. Bangkok, Thailand, 1985. (Drafted document)
3) Office of the National Education Commission. A Proceeding Report of the Seminar on Specification of Objectives and Policies of the Sixth National Education Development Plan (1987-1991), Bangkok, Thailand, 1984.
4) Office of University Affairs.
General Information. Bangkok, Thailand, 1981-1982.
5) Pitayanon, S. Higher Education, Labor Market and Manpower Planning in Thailand, RIHED Bulletin, Vol. 11, No. 1, January—March 1984, pp. 15-18.

« COMMENTS ON DR. PRASARN'S PAPER »

Yoshiya Abe*

I have been quite impressed with the fact that Thailand is now facing the problems which many countries experience during transition from elite higher education to mass higher education. Thailand seems to have been so successful in coping with needs and problems brought about by such a transition via clever planning and these facts have been very eloquently presented by Dr. Prasarn Malakul. This kind of careful planning and implementation (perhaps a little bit rigid) has served to improve access to higher education. Good examples of this are the establishment of Thammasat University, Ramkhamhaeng University and now by Sukhothai Thammathirat Open University which is now actually attempting to meet with 2 fundamental needs, mainly to to cope with the concentration of higher education in metropolitan Bangkok. Ramkhamhaeng, which really opened its doors did not meet with the other pressing need of expanding local access. On the other hand this new approach has met with local needs by distance technology.

Perhaps you have also been successful in coping with the needs of the people by admitting those people who really have essential needs (just by looking at the kinds of students at Sukhothai Thammathirat we see that many of them are government employees seeking to improve their skills, i.e., teachers, govt. clericals) who might upgrade their abilities to cope with social needs. I feel that Thailand has been so successful and has been very cost effective in dealing with the access problems. However, there is also a fundamental question which has been raised by Dr. Prasarn by the presentation of Table 9, that is, how is Thailand going to deal with wastage of resources; not only resources in money but also in human capital. This kind of mismatch is facing not only Thailand but also the so-called industrialized countries such as Japan, the U.S., the U.K. They are all meeting those questions from different angles. In the case of Japan probably the most keen question for the moment is examinations. As a matter of fact, just last Saturday and Sunday we had national entrance examinations. One ironic note about these exams was that a question on the examination contained an error as to how many countries were included in ASEAN. The author of the examination did not appear to know the correct number of ASEAN

* Professor, National Institute of Multi-Media Education, Japan

countries. But this examination is a very interesting question facing Japan. The examination itself is not as interesting as the fact that it represents the relationship between secondary and tertiary education. This is indeed interesting as is the definition of an examination, i.e., whether it is competition or a device for qualification or an examination (concur or Examen). The way this question will be dealt with is something which might really change our nature. In a similar way Americans are suffering from the deterioration of quality and trying to get back to the basics of the core curriculum and curriculum changes. Perhaps it is a fundamental question as reported by "a Nation at Risk". The British are considering upgrading the quality of teachers but I don't know if this type of thing will ever be successful. In this regard Thailand is also reaching the stage of change from an elite to a mass system where the problems are not only bringing an elite to lead the country but also reaching fifteen percent of the age cohort coming to tertiary education. Thailand is also facing the problem of how to finance this mass higher education, a problem involving a great deal of money and a great number of persons. This leads me to the question as to which policies will be the most important for Thailand in dealing with the problems I mentioned.

PROSPECTS AND PROBLEMS IN JAPANESE HIGHER EDUCATION
— An Age of Adaptation sans Expansion —

Masakazu Yano*
Fumihiro Maruyama**

1. Introduction

In Japan the age of educational expansion ended in the late 1970s. The present post-expansion stage has been characterized by several catch phrases such as "the age from quantity to quality", "the age from expansion to decline", "the age toward diversification", and "the age from laissez-faire to planning", but no clear future perspectives of higher education have been made yet. The important task we are now facing is to point out the dysfunctions and shortcomings of the educational system which were brought about during the period of expansion, and to clarify the function of higher education.

The purpose of this paper is to point out several characteristics of Japanese higher education and major policy issues, and to provide basic data in order to facilitate the exchange among foreign countries. First, we will explain some historical trends in educational growth and show that at the present time, a new era of higher education is just beginning. Secondly, we will summarize certain characteristics of the higher education system and its social and economic background into five main points. Thirdly, it will be shown that these five points are closely related to the main policy issues. We use the following frame work including these points in order to understand the characteristics and policy issues in Japanese higher education. (1) Educational Demand and Supply, (2) Public and Private, (3) Mass and Selective, (4) Urban and Rural, (5) Labor Supply and Labor Demand.

As well, we will not deal with the research function of higher education, faculty personnel, organizational management, but only with the education function of Japanese higher education.

2. Historical Trends — the Fourth Wave of Education Expansion

In the late 1970s, Japan experienced two symbolic phenomena relating to education and the labor market. One was the gradual decline in the enrollment ratio.

* Associate Professor R.I.H.E.
** Research Associate R.I.H.E.

Zero growth in higher education for the past ten years, partially brought by the ceiling effect in the high school enrollment ratio, was an unusual occurrence in the educational history. Another phenomenon was even more astonishing. In 1977—78, the main components of the production labor population shifted from primary school graduates to secondary school graduates. The share of primary school graduates has decreased gradually since around 1935 when its share was the highest (80 percent). And it was reversed by the increasing share of secondary school graduates. In near future the proportion of college graduates production labor population will be larger than that of primary school graduates.

Figure 1 and 2 show historical trends of enrollment as a flow and share of manpower stock for the past one hundred years. It is possible to divide the process of education expansion into four periods, considering the movement of flow and stock. It becomes clear that each period continues for 30 to 35 years and the present time should be the beginning of the fourth stage.

The first period was the time up to around 1910 (late Meiji era), which was characterized by a development in primary education. In only 30 years after inauguration of the modern Japanese education system, primary school enrollment rates reached 80 percent. This was due mainly to the cultural and educational heritage from the Edo period. As to the manpower stock of this period, the percentage of primary school graduates became larger than that of not-formally educated persons. By 1910 these two stocks reversed in position.

The second stage was the period up to pre-World War II. During this period, there was a development in secondary and higher education. The institutions of secondary and higher education had been established in the first period, but they began to grow in the 1910-1920 period (Taisho and Showa era). As to the stock of manpower, the share of primary schools graduates achieved its highest peak. At the same time, there was a gradual increase in secondary school graduates. This share became larger than that of the not-formally educated.

The third stage was a period of rapid growth between the post-war period and 1975. Junior high school became compulsory, high schools shifted from a mass to para-compulsory education, and the university changed its function from training the elite to one of mass education. During that time, the stock of secondary school graduates increased and reached the same level as that of primary school graduates.

However, the rapid growth of the flow stopped with the energy crisis and the fourth stage began. One should pay attention to the fact that the new fourth stage

Figure 1. Enrollment Ratio

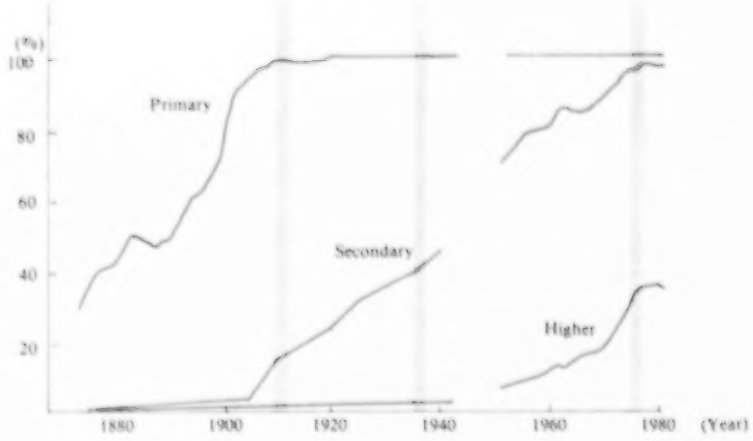
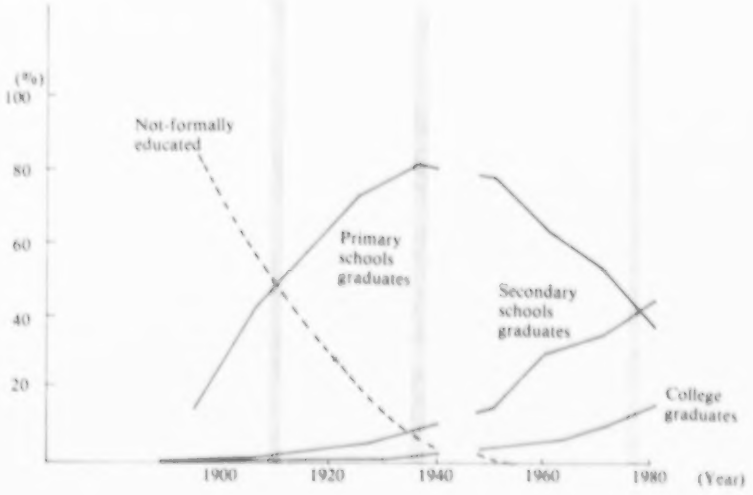


Figure 2. Share of Manpower Stock



is a period in which the wave of educational stock proceeds more rapidly toward a highly educated society, although the flow stops growing. That is, the results of the rapid growth period (the third stage) certainly appear in the stock of this stage. Without examining the outcome of the third stage education, one cannot write a precise scenario for the fourth stage.

One will find that the past three stages have continued for about 30 to 35 years. Considering that the fourth stage began 30 years after World War II, the current non-growth phenomenon is suggested as more than temporary. It is not certain what social character this new stage has. Will this period of non-growth continue? Or decline? Or is it a preparatory period for the next growth period? We seem to be now in an age where we make our own scenario and form our own perspectives and choose from them.

3. Characteristics of the Present Situation and Social and Economic Background

The following five points will be made about the features and social and economic background of higher education in the fourth stage.

1) Demand and Supply — a Levelling off of the Individual Demand?

Why did the growth of demand for higher education stop? Will this non-growth continue? The results of empirical analysis on the rate of applicants to higher education since 1958 show that the potential demand for higher education never declines (Yano, 1984a). The following four reasons explain the non-growth of higher education:

a) The growth rate in miscellaneous expenditure in house hold income (ability to pay for education) declined after the energy crisis.

b) Since the tuition costs (price) went up at a higher rate than the income growth, the applicant rates were reduced. During expansion, on the other hand, the income growth rate is higher than tuition growth.

c) At the same time, because of the limiting policy of higher education, supply did not expand and there was no increase in the ratio of the number of successful applicants against the total number of applicants (i.e. the ratio of successful applicants). During the expansion period, supply increased and the success rate went up.

d) Between 1975 and 1978 applicant rates were abnormally higher because of the uncertain and unstable economic situation. Thus the present applicant rate should not be evaluated as lower, considering this abnormally higher rate between 1975 and 1978 as reasonable values.

Economic variables and the possibility of entrance into universities (supply) can explain this trend of demand for higher education both during expansion and for non-growth periods. There is a possibility that higher education will expand from the present non-growth if the economic situation is improved and an increase of supply occurs. People will continue to have a demand for higher education.

2) Public and Private — the Age of Private?

One main reason for educational expansion lies in the growth of private institutions in Japan. Public or national universities did not expand so much even during the expansion period. In 1980, 75% of the total enrollment was at private university and 72% of the total institutions were private. Table 1 shows these quantitative trend of institutions and students. Between 1955 and 1980, the number of private universities increased from 122 to 319, while the number of national universities only increased from 72 to 93.

Table 1. Number of Institutions and Students

		Universities		Junior Colleges	
		Institutions	Students	Institutions	Students
National	1955	72	186,055	17	3,637
	1960	72	194,227	27	6,652
	1965	73	238,380	28	8,606
	1970	75	309,587	22	9,886
	1975	81	357,772	31	13,143
	1980	93	406,644	35	14,685
Public	1955	34	24,936	43	11,080
	1960	33	28,569	39	11,086
	1965	35	38,277	40	13,603
	1970	33	50,111	43	16,136
	1975	34	50,880	48	17,973
	1980	34	52,082	50	19,002
Private	1955	122	312,366	204	63,168
	1960	140	403,625	214	65,719
	1965	209	660,899	301	125,900
	1970	274	1,046,823	414	237,197
	1975	305	1,325,430	434	322,666
	1980	319	1,376,586	432	337,437

The financial resources of private universities during the expansion depended almost entirely on tuition from students. The cause of the growing demand despite

higher tuition lies in the rapid growth of income against tuition and strong higher educational aspirations. On the other hand, private institutions provide less expensive and lower quality education for their students because of a reduction of costs. Laissez-faire or non-planning higher education was criticized because the condition of education was not significantly improved. Michio Nagai labeled the problem of private universities during expansion "a crisis in the midst of prosperity."

When the expansion period ended and the non-growth period began, public subsidization to private universities was initiated, and this improved private university financing. On the other hand, national university tuition was raised, the difference between national and private university tuition declined from one seventh (1970) to a half (1980). In addition to this, it has often been pointed out that applicants are less inclined towards national universities. Previously Japanese higher education has been quantitatively heavily dependent on the private sector. A critical period is facing the private university sector as to whether they will make substantive improvements or not.

3) Mass and Selective Higher Education — Hierarchical Structure

During the post-war expansion of higher education, several countries reformed their fundamental systems of higher education to accept increasingly more students. But Japanese higher education has never experienced any drastic system changes during its expansion. There are basically two ways to fulfil the increased demand for higher education. One way is to build new types of institutions for the masses, maintaining at the same time the traditional institutions mainly for the elites. This strategy has been taken in several European countries where new types of institutions of higher education have been established to accept the masses. Another way is to enlarge the size of each existing institution or to build more traditional institutions without changing the system of higher education as a whole. Japan adopted this strategy, and the number of traditional institutions of higher education has greatly expanded, and very few new types of higher education institutions have been introduced during post-war expansion. The number of enrolments in two-year and four-year institutions increased as much as 3.16 times, from 710,000 to 2,242,000 between 1960 and 1978. This increase has been absorbed by the existing traditional type of two- and four-year institutions. Thus, the system of higher education has almost remained the same during expansion. However, in the process of higher education expansion, all of the institution did not enlarge their size equally; the prestigious universities such as Tokyo and Kyoto did not expand in size. It was the less-selective private institutions and new

institutions that greatly expanded in size. These institutions accepted large number of less competitive students. As a result, a clear hierarchical structure in higher education was shaped among more than 900 two- and four-year institutions, where students' abilities, orientation, and job opportunities were clearly different. Tokyo university occupied the most prestigious position in the hierarchy and attracted highly competitive students while private non-selective institutions built after World War II were placed at the bottom of the structure. This hierarchical structure became more visible as large number of students entered higher education. As Table 2 shows, for example, the difference of job opportunities among six types of institution is obvious. Most prestigious *National I* send their graduates to bigger size companies while less *prestigious II and III* to smaller companies.

4) Urban and Rural — Geographical Unequal Opportunity

As pointed out earlier, one of the features of the expansion of Japanese higher education is that it has mainly depended on the private sector of higher education. This brought about an unequal distribution of higher education opportunities in various regions. In the 1960s, although private two- and four-year institutions were built in rural areas, many more new private institutions were established in the metropolitan areas. The big cities were a good market for private institutions to recruit students

Table 2. Employment of College Graduate by Size of Company and Type of Institution

(%)

Type of Institution	Size of Company I	II	III	IV	V	VI	
National I	3.1	7.1	5.6	23.9	46.4	14.0	100
Private I	3.0	7.1	7.2	34.1	43.9	4.7	100
National II	5.8	13.1	8.4	24.9	33.5	14.3	100
National III	8.6	19.6	10.9	25.4	21.5	14.0	100
Private II	6.5	21.2	13.8	30.8	16.5	11.2	100
Private III	15.4	28.9	12.6	18.3	8.7	16.1	100

Size of Company

I : less than 99
II : 100—499
III : 500—999
IV : 1000—4999
V : more than 5000
VI : Government employee

Type of Institution

National I : Old 7 imperial universities
National II : Prestigious national universities
National III : Less prestigious national universities
Private I : Waseda and Keio universities
Private II : Old private universities
Private III : New private universities

Data from Amano (1978)

because of the large student-age population and because they could attract students from other rural areas as well. As a result, the opportunity for higher education was distributed unequally among various regions in Japan. For example, in 1975, 34% of the enrolment in higher education was in Tokyo and an other 24% was in other major urban areas (Table 3). As will be discussed later, however, this situation has changed in the last ten years.

Table 3. Fluctuations in Total Enrolments and Their Geographical Distribution

( ): %

	1975	1976	1977	1978	1979
Tokyo	711,870 (34.1)	718,369 (33.3)	722,103 (32.6)	686,658 (30.6)	674,465 (30.4)
Big cities designated by cabinet order	502,171 (24.0)	505,121 (23.4)	508,020 (23.0)	510,723 (22.8)	503,721 (22.7)
Other regions	873,823 (41.9)	933,176 (43.3)	983,484 (44.4)	1,045,180 (46.6)	1,042,178 (46.9)
Total	2,087,864 (100.0)	2,156,666 (100.0)	2,213,607 (100.0)	2,242,561 (100.0)	2,220,364 (100.0)

Data from the Ministry of Education

5) Labor Supply and Labor Demand — Flexible Employment Structure

As the economic situation became worse, unemployment increased among college graduates in the United States and European countries. But this has not happened in Japan because of the more favorable economic situation and a flexible employment structure in which there is no serious mis-match between education and employment.

One of main functions of higher education has traditionally been training for professional and technical occupations. But the number of graduates entering into such occupations is declining, for example, in 1960, 42.7% of college graduates entered professional occupations while this number decreased to 40.7% in 1982. Instead of going to professional occupations, more and more students got clerical and sales occupations which were previously considered as occupations only for high school graduates. Among all college graduates, 34.2% of them entered clerical fields and 20.2% of them entered into sales in 1982 (Table 4). The increase of graduates entering clerical and sales occupations was one of the reasons which prevented

Table 4. Occupational Distribution of the Newly Employed Graduates of Universities (May 1, 1982)

Occupation	Number of the Newly Employed
Professional and technical workers	119,451 (40.7%)
Managerial workers	773 (0.3%)
Clerical workers	100,212 (34.2%)
Sales workers	61,334 (20.9%)
Farmers, lumbermen and fishermen	613 (0.2%)
Mining workers and quarry men	6 (0.0)
Transport and communicating men	738 (0.3%)
Craftmen and production process workers	1,263 (0.4%)
Protective workers	3,452 (1.2%)
Service workers	3,348 (1.1%)
Others	2,154 (0.7%)
Total	293,344(100.0%)

Table 5. Component Ratio by Specialization of Students at Higher Education Institutions

Fields		1965		1973		1983	
		No. of students	%	No. of students	%	No. of students	%
Universities	Natural sc. (a)	289,551	32.3	507,175	33.3	605,396	35.0
	Social sc. (b)	367,106	41.0	634,835	41.7	680,141	39.3
	Humanities (c)	238,898	26.7	381,064	25.0	444,095	25.7
	Total	895,465	100.0	1,523,074	100.0	1,729,632	100.0
Others	Natural sc. (a)	77,288	51.3	141,477	43.6	435,617	56.0
	Social sc. (b)	22,093	14.7	33,975	10.5	84,300	10.2
	Humanities (c)	51,262	34.0	149,332	46.0	258,015	33.2
	Total	150,643	100.0	324,784	100.0	777,932	100.0

Data from the Ministry of Education

unemployment among college graduates in Japan.

The main reason for this increase in graduates entering clerical and sales occupations lies in the composition of students' study fields. Students in the humanities and social sciences have been the largest student body in Japanese higher education (Table 5). They have occupied more than 50%, while students in engineering, natural sciences, and agriculture occupied 25.6% in 1980 and this percentage has not changed for several decades. Students in the humanities and social sciences can be absorbed in clerical and sales occupations more easily than students in other fields of study such as natural sciences, engineering, and education because students in the humanities and social sciences tend to get a more general education while students in engineering and education, get more specific training for their future vocation. Thus unemployment problem in Japan was softened by the student composition of study fields.

The fact that more and more graduates have entered into sales occupation is thought be related to an occupational downgrading and decline in economic value of college graduates. But the relative wages of sales occupations to other occupations has increased (Maruyama, 1982), which means there has been a stronger labor demand for this occupation. Thus it is reasonable to consider that college graduates have entered into sales occupations due to this labor demand rather than having been forced to.

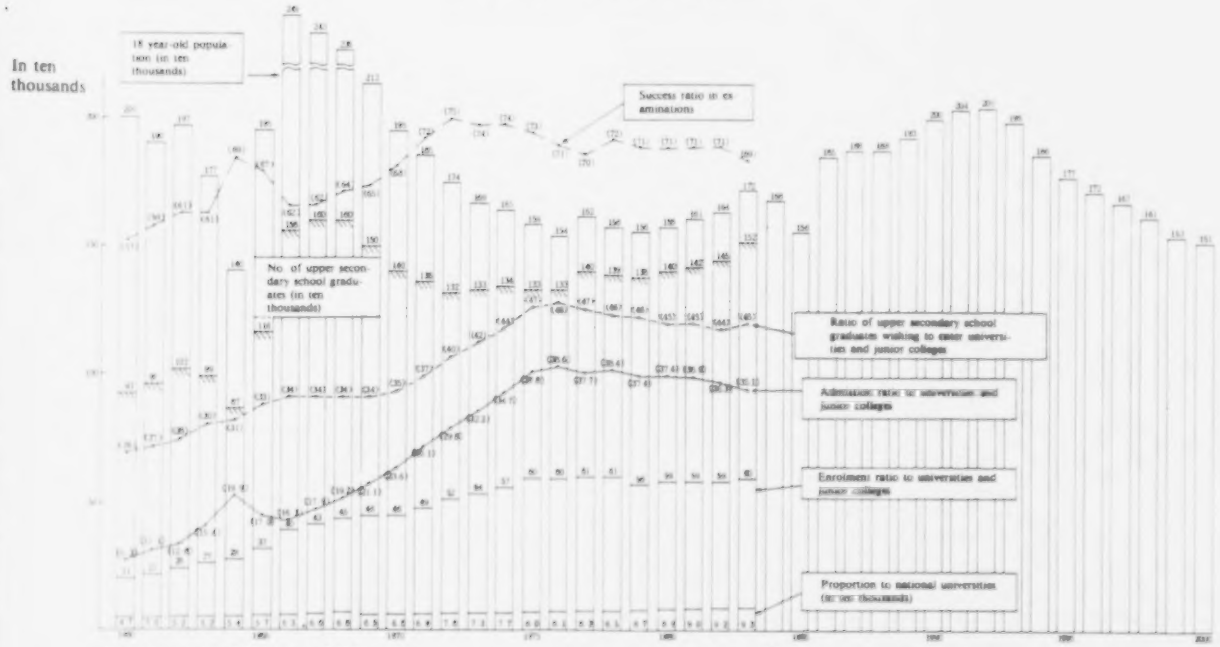
4. Problems and Policy Issues

The characteristics of higher education which emerged during the expansion period are directly related to the problems needed to be solved. The five previously mentioned points are not only characteristics but also the aspects in which higher education can not respond to the future social change. In the following, current major policy issues are examined along with the five characteristics.

1) Impact of Demographic Change on Demand and Supply

Even if the enrollment ratio remains the same, the number of enrollments varies according to the size of the 18 year-old population. The size of the 18 year-old population will increase from 1.72 million in 1983 up to 2.05 million in 1992, then it will decrease and is estimated to reach 1.51 million in the year 2000 (Figure 3). How higher education adjusts to and deals with this changing population is one of main planning issues facing Japan. Mombusho's (the Ministry of Education) latest planning for higher

$$\text{Success rate} = \frac{\text{No. of entrants to universities and junior colleges}}{\text{No. of upper secondary school students wishing to enter universities and junior colleges (including Rōnin)}}$$


In ten thousands
18 year-old population (in ten thousands)
Success ratio in examinations
No. of upper secondary school graduates (in ten thousands)
Ratio of upper secondary school graduates wishing to enter universities and junior colleges
Admission ratio to universities and junior colleges
Enrolment ratio to universities and junior colleges
Proportion to national universities (in ten thousands)

Data from the Ministry of Education

Figure 3. Trends in Japanese Higher Education

BEST COPY AVAILABLE

education (1984) shows that in 1992 it will still be necessary to maintain the same level of enrollment rate as in 1983. And in order to achieve this goal the increasing population of higher education should be absorbed both by the continuous increase in enrollment capacity and by a temporal increase in capacity for this specific period. In the shrinking period after 1993, the temporal capacity increase in this specific period will be phased out gradually.

The aim of Mombusho is to maintain the present enrollment ratio. In this process of planning, the issues during the decreasing period are recognized as more difficult to handle rather than those of the increasing period. There is a possibility that the number of students will decrease because of the population decrease and educational demand will become smaller than supply. In this case, especially private universities are likely to face a financial crisis. However, according to the analysis shown earlier, the growth of successful admission rate is a factor which will increase the demand for higher education. If this is true, the successful rate will go up during the period of decreasing population, causing an increase in enrollment rate. So it is necessary that the planning for the post 1993 era should include two cases; one is the case for crisis of management and another is that of the growing enrollment rate.

2) Financial Constraint — Decrease of Subsidies to Private Universities

Efficiency not only in education but also in all sectors of administration is the priority task of a government's policy. Thus it is necessary that national university growth and also subsidies to private universities be restrained.

The number of student enrollment capacity in national two- and four-year institution is, in fact, declining. The increase in enrollment capacity in 1978 was 2,140, but it declined, to 390 in 1984.

On the other hand, government subsidies to private universities have decreased since 1981. The proportion of the subsidy in the total current expenditure was 30 percent in 1980 and decreased to 21.5 percent in 1984.

Government subsidies to private universities are made by political judgement with little consideration for the economic situation. Thus, planning for higher education should be made, based on theoretical considerations of subsidies to private universities. We have made an empirical analysis of the theoretical reasons for subsidies (Yano, 1984b).

The case for subsidies to education can be justified by reasons of both efficiency and equality. The external benefit of education is a main argument for efficiency

Table 6. Rate of Return to Education

		Social Rate of Return (%)	Private Rate of Return (%)		Public Rate of Return (%)	
			I	II	I	II
High School	Public	5.5	6.1	5.9	1.7	3.4
	Private	5.7	5.7	5.5	5.2	6.8
Junior College	National	4.7	5.1	5.0	2.3	3.6
	Private	4.9	4.8	4.7	6.0	6.7
University	National	5.4	7.1	6.9	•	2.3
	Private	6.9	6.7	6.5	7.7	8.9

Note: I; Income Tax, II; Income Tax + Other Taxes

and the equality argument is that resulting lower tuition will make it easier for less affluent students to have a better access to education.

There are two dimensions to the income redistributional effect of the educational finance system. The first is the income redistribution from students of wealthy families to those of less wealthy families which is the equality argument. The second is from the users of education to non-users which is a kind of external benefit, since people with more education pay more taxes.

The second effect can be examined from the results of the disparity between the social rate of return to education and the private rate of return. The social rate of return will be lower than the private one when students pay only a part of the full cost of their education even if more highly educated people paid more taxes. The educational subsidy, however, is low and taxes are high so that the disparity shifts, resulting in the social rate being above the private one. In addition to these two rates, there is a third measure, the public rate of return, which relates the cost of education as incurred by the public to the benefit as realized by incremental taxes. The results of the three rates of return can be seen in Table 6.

The findings are as follows:

a) The current subsidies to private universities are efficient, because the three rates of return to private schools are nearly equal, namely, the people who benefit from education share the cost of education.

b) Considering other external benefits of education, it is better to increase the subsidization a little more.

c) The finance system of public higher education is regressive, it seems to follow

that the public higher education system is an instrument for redistributing benefit from non-users to users. It is necessary to do away with the large gap between private and public education.

d) After reconstructing the educational finance system, it is important to inquire into the redistributional effect between income levels.

3) Diversification of Higher Education

As members of the OECD education research group pointed out, one's social and occupational status in Japan is determined during the college entrance examination at age 18. This entrance examination is very important for the individual's future success. This importance is the background of the world famous competition for college entrance which is often called "Examination Hell".

This competition became even more severe as the hierarchical structure of higher education became fixed. This was because high school graduates sought to enter more prestigious colleges and universities. As a result, severe competition for entrance occurs especially in prestigious institutions such as Tokyo university.

Such over-heated competition for entrance has been criticized as one cause of the deterioration of both high school curricula and a well-rounded adolescence. One policy to avoid such an examination hell is to change the rigid hierarchical structure of higher education to build a more diversified system of higher education. Diversification is supported not only by those who criticize examination hell but also by individual and social needs demand, which will be discussed later.

4) Geographical Equal Opportunity for Higher Education

As pointed out earlier, educational expansion brought about an unequal distribution of higher education opportunity. People in bigger cities can have access to higher education at a lower cost than people in other areas because people in rural area have to move into cities if they want higher education. This unequal geographical distribution was improved by Mombusho's (the Ministry of Education) policy and its implementation. Mombusho's recent policy was to limit the growth of educational institutions in metropolitan areas in order to equalize higher education opportunity among regions and to provide more opportunity to rural areas. Due to this policy, the share of enrollments in Tokyo decreased from 34% to 30% and in other major urban areas from 24% to 23% between 1975 and 1979. The policy in limiting the educational institutions in metropolitan areas continues to be supported in the

latest higher educational planning by Mombusho (1984).

But there is one problem with that policy. The 18 year-old population will increase in the next several years and this increase will be more rapid, especially in the metropolitan areas. For example, in 1975, 17.3% of the 18 year-old population lived in the South Kanto area which includes Tokyo, Yokohama and Kawasaki. But this proportion rose to 21.1% in 1980, 24.6% in 1986, and 26.5% in 1991. Thus if the policy limiting growth in metropolitan areas continues, the balance between educational supply and demand will be disrupted and competition for entrance will become more severe among applicants in this area.

5) Labor Demand and Individual Needs in Changing Society

One main function of higher education is still to train high level professional and technical manpower. Japanese higher education has trained professionals such as medical doctors, dentists and elementary and secondary teachers and demand for these professionals has been fulfilled enough and is not predicted to increase. But manpower needs in such areas as micro-electronics, bio-technologies, fine-ceramics, information technology, etc. are predicted to increase in the near future. Thus higher education is required to respond to such needs.

In addition to professional needs, there are also needs for para-professionals. There are many high school graduates who want to seek more specific vocational training in higher education. "Special training schools" (Senshu-gakko) fulfil these demands and they are increasing every year. They offer systematic educational activities aimed at helping students develop their abilities required for vocational and daily life, and also at helping improve their cultural standard.

Higher education is required to respond not only to labor demand but also to students needs. As higher education goes into the mass stage, there is an increase in "general" students whose orientation during college is ambiguous and whose purpose is to get a liberal arts education rather than professional knowledge and vocational skills. Japanese higher education has accepted these general students, mainly absorbing them in such fields as the humanities and social sciences. From the employer's view, these students are likely to have less professional knowledge and skills, but company's on-the-job training programs helps to train them after employment.

During the expansion, higher education was able to respond to manpower needs and individual needs by expanding in size. But at the present time of non-growth, higher education must take another strategy in the changing society. Higher education is

required to be more diverse. The diversification of the system, to respond to the changing needs, is the most important policy issue in Japanese higher education.

With this social background, several innovations were made; the University of Tsukuba in which research and teaching are clearly divided, the Nagaoka University of Technology and Science and Toyohashi University of Technology and Science which are higher education institutions for training of creative and practical engineers, the Joetsu University of Education and the Hyogo University of Teacher Education providing in-service training for teachers. In addition to these new universities, the University of the Air also was created in 1983. These movements reflect the diversification of Japanese higher education.

5. Concluding Remarks

As shown above, an age of expansion ended in Japanese higher education. But this does not mean that people lost their expectations for higher education. On the other hand, the society will change more rapidly than ever before. Thus the impact of both peoples' expectations and societies' needs for higher education are predicted to be larger than at the present time. We have dealt with these emerging impacts of the changing society, but these are only a part of the whole situation. For example there are also policy issues on teaching on higher education, unequal opportunity for people from less affluent backgrounds and for women, and internationalization of higher education which is a principal issue for this seminar.

The educational growth stopped but society is still changing. Thus the gap between the education system and other systems of society becomes wider. During education expansion, higher education was able to fulfil society's needs by adding new functions to all the traditional functions. However, it has to adopt other strategies to meet social needs because the past adding-strategy is impossible in the post expansion era. One alternative strategy is the so-called method of scrap-and-build, where new functions can be achieved only after abolishing the useless institutions. It is difficult to use this method, but it is the only method that higher education should adopt. The age of expansion was called "a crisis in the midst of prosperity", and the age of adaptation sans expansion is facing an even more difficult situation. From the perspective of reform however, we can say that now there is "a golden opportunity during the period of stagnation" because the method of scrap-and-build itself is strongly reform oriented.

Bibliography

Amano, I. "Daigaku no Senbatsu Kino (Selecting Function of Universities)", *IDE* (Institute for Democratic Education), No.187, (March, 1978), pp43—50.

Maruyama, F. "Study on the relationships among Educational, Occupational, and Income Structure", *Research in Higher Education*, Hiroshima University, RIHE, 1982, pp23—41. (in Japanese)

Yano, M. "The Determinants of Individual Demand for Higher Education", *The Journal of Educational Sociology*, No.39, the Japan Society of Educational Sociology, 1984a, pp216—228. (in Japanese)

Yano, M. "An Economic Analysis of Subsidies to Private Universities", *Research in Higher Education*, Hiroshima University, RIHE, 1984b, pp39—58. (in Japanese)

« COMMENTS ON PROF. YANO AND DR. MARUYAMA'S PAPER »

Kim Jongchol*

Professor Yano and Dr. Maruyama, in their joint work, apparently attempted to analyze Japanese higher education in the context of our common theme from three vantage points which are logically consistent and linked with each other. First they were concerned with the historical trends in expansion of Japanese higher education, coming up with the conclusion that the fourth wave or a new stage of non-growth emerged since late 1970's. Secondly they attempted to analyze the characteristics of the Japanese higher education at the emerging stage along with its socio-economic back-grounds. Employing five-point criteria as a conceptual frame of reference for their analysis they clearly showed us where Japanese higher education stands today and how it has been brought forth. Lastly they discussed problems and policy issues Japanese higher education is facing today and tomorrow. Again they concentrated on five major issues logically linked with the five criteria employed at the second stage analysis. Thus they came up with the final conclusion that Japanese higher education now faces a radical reform, categorically employing the words, "the method of scrap-and-build."

With this sketchy description of the paper let me now turn to some comments. Taken as a whole, it appears, they presented so eloquently and logically what they originally aimed to explore that I only admire their laborious work in bringing together important resources and information backing up their points so successfully, leaving little room for any critical comments. To fulfill my functions as discussant, however, at the risk of revealing my ignorance of Japanese higher education, I feel I must follow up their analysis in further depth.

Concerning the description of historical trends of development in Japanese higher education, particularly in terms of quantitative expansion, I have no special comments to make except that I should perhaps point out that the Japanese pattern of development seems to coincide with general trends in other advanced nations, such as the US and the UK, which are already showing minus growth symptoms.

Relative to the analysis of the characteristics of the present stage of higher education in Japan I admit that most explanations given were well founded and sound

* Professor, Seoul National University

reasonable. In this connection, however, I wish a few points had been made clearer. First in explaining the causes of non-growth in recent years they only referred to "the limiting policy of higher education" as well as a decline in government subsidies to private higher educational institutions. I wish the role of the government had been given clearer explanation. I am not sure what was really meant by the limiting policy of higher education; whether it referred to government policy, admission policy of individual institutions or both. Secondly I wonder what were the major reasons for strengthening the hierarchical structure in the course of expansion in Japanese higher education. Of course linear expansion based on traditional systems, with heavy reliance upon the private higher education sector was given as a major cause. It keeps one wondering what were real underlying causes particularly in the perspectives of political economy. Thirdly the writers claimed no serious mismatch between education and employment despite that the overwhelming proportion of university students population were enrolled in humanities and social sciences. They seemed to attribute it to the changing pattern of labor demand in an age of higher-level certification-bound society or Kogakureki Shakai in Japanese. I wish I could hear more about the secret of such success without serious government intervention.

In regard to discussions of the problems and policy issues for today and tomorrow I accept them as enlightened opinions based on well considered judgments. As presented, those five points do seem to be problems. If, however, there has been no serious mismatch between higher education and employment and if the quality of higher education has not noticeably suffered from expansion in contrast to many other Asiatic countries, I wonder why Japanese higher education must be reform-oriented to the extent of necessitating employment of the so-called scrap-and-build method or strategy. Two important questions need to be answered in this connection. It is really so necessary? And is it feasible in spite of the prevailing general tendency among academicians directed towards conservatism?

HIGHER EDUCATION EXPANSION IN THE PHILIPPINES: PROBLEMS AND PROSPECTS

Benwardo V. Umila*

INTRODUCTION

Schooling in the Philippines consists of three levels—elementary, secondary and tertiary. The Constitution provides for free elementary education which starts at the age of seven. In general, elementary schooling lasts for six years although there are schools, particularly private schools, which have elementary programs from Kindergarten to Gr.7. The language of instruction is Filipino and English. In some regions, the medium of instruction is the language of the region for the first four years with English added during the last two years.

Graduates of elementary schools are qualified to enter the secondary schools which take four years to finish. Curricular offerings at this level follow a common prescription mandated by the Ministry of Education, Culture and Sports. However, individual high schools are free to enrich this common curriculum.

Secondary graduates must pass the National College Entrance Examination (NCEE) given annually by the Ministry before they can be admitted to colleges and universities. Some schools, like the University of the Philippines, give additional qualifying tests as local requirement for admission.

Degrees are granted by colleges and universities after four years of study. This is true for most degree programs except in fields like medicine, law and engineering. Some universities offer graduate degree programs which take from one to five years years to finish depending on the area of specialization.

Control and supervision of these three levels of education is exercised by the Ministry of Education, Culture and Sports through three Bureaus—Bureau of Elementary Education, Bureau of Secondary Education, and Bureau of Higher Education. Chartered state colleges and universities, however, do not fall under the jurisdiction of these three bureaus. In the case of the University of the Philippines, governance is vested in an independent Board of Regents.

* Director, Office of Research & Development, College of Education, University of the Philippines

DEVELOPMENT AND EXPANSION OF HIGHER EDUCATION

Historically, higher education came to the Philippines with the coming of the Spanish colonizers some three hundred years ago. The aim of education at that time was the Chistianization of the Filipinos; the purpose, to bring the archipelago under Spanish domination. The University of Santo Tomas, a religious school, was the first institution of higher education in the Philippines. It was established as early as 1611 for the purpose of propagating the colonial interests of Spain.

American occupation of the country started in the early 1900s. During these years, the Philippine Normal School (now a state College), the Philippine School for Arts and Trades (now Technological University of the Philippines, a state university) the Manila Business School (now Polytechnic University of the Philippines, another state university) were established by the American colonial officials. These institutions were designed to orient the Filipinos to democratic ideology and to train them as teachers in elementary and industrial arts as well as leaders of government. This period marked the beginning of the dual system of education—the government schools and the privately-owned-and-operated schools. At present, the majority of elementary and secondary schools are run by the government while the rest are in the hands of the private sector. The situation is reversed in the case of tertiary education. Data available at the Ministry of Education, Culture and Sports (SY 1981-1982) show that 96% and 62% of elementary and secondary schools, respectively, are owned by the government while only 30% of tertiary schools are state colleges and universities. It is quite natural, therefore, that any discussion of education in the Philippines will have to take into consideration the contribution and roles played by both public and private sectors.

Government participation in higher education started with the creation of the University of the Philippines in 1908, as a non-sectarian and non-partisan institution of higher learning. The founding fathers of the University hoped to provide Filipinos with advance instruction in philosophy, science and arts as well as professional and technical training. Starting with only seven colleges, about 100 faculty members and 300 students, the University now serves about 35,000 students with a teaching staff of about 3000. Now organized as a System, the University includes four autonomous campuses, namely UP Diliman (the main campus), UP Los Banos (specializing in agricultural science and forestry), UP Manila (health sciences research and education), and UP Visayas (fisheries and marine sciences). In addition, it has seven regional units and 48 research and extension service centers and programs, a total

of 45 degree-granting units with 700 degree programs. Up to 1946 when the Philippines gained independence from the Americans, the University of the Philippines was the only government university. Since then, colleges and universities, both public and private, have grown, not only in numbers but also been dispersed outside Metropolitan Manila.

Whereas in 1941 there was only one state university, 13 public colleges, eight private universities and 84 colleges, in SY 1981-1982, government-run institutions of higher education totalled 316 colleges and universities (17 state universities, 31 state colleges, 45 community colleges and 223 non-chartered institutions). During the same schoolyear, there was a total of 722 private institutions of higher education (49 universities, 461 colleges and 212 vocational-technical schools.) In terms of enrollment, figures indicate that as of schoolyear 1984-85 about 1.5 million students were enrolled in both private and public universities and colleges. By the end of that schoolyear 19% of the total enrolment were graduated of which 71% were given college degrees. Commerce and business administration graduated the most number, followed by engineering technology, medical science, teacher training, arts and sciences. Other fields of study in lesser percentages were agriculture, chemistry, food and nutrition, law and foreign service, music and fine arts, and masteral and doctoral studies. In terms of teaching staff, there were about 55,000 faculty members in both public and private tertiary institutions in 1984-85. These data show the increasing trend in number of tertiary institutions within the last four decades in Philippine education. This is mainly due to the efforts of the government of expand its educational programs in the tertiary level.

The growth of higher education in the Philippines is part and parcel of the plan to improve the educational system of the country as recommended by the Presidential Commission to Survey Philippine Education (1972). The Commission was charged "to undertake a thorough study and assessment of Philippine education in order to analyze the system's performance and relevance to national development goals, to ascertain and recommend ways and means for improving its efficiency within the limits of available resources and to identify critical areas in Philippine education requiring more detailed study". One of the mechanisms for accomplishing this task was the formulation of the guiding principles of the Ten-Year Development Program listed below:

1. Improvement of the quality of instruction at all levels by upgrading physical facilities, adoption of instructional innovations and technology, and in-service training of teachers and administrators.

2. Restructuring of higher education in line with national development goals through a systematic program of assistance to both public and private colleges and universities, standardization of curricular programs, accreditation schemes, and admission testing programs.
3. Equalization of educational opportunities through scholarships and financial assistance to poor but deserving students, continuing education and skills-training program for adults and out-of-school youth.
4. Improvement of systems of financing higher education to facilitate equalization of educational opportunities and greater government participation in higher education.
5. Expansion of existing programs and institution of new ones ones for training technical and agricultural manpower.

To give legal grounds for this national effort to revitalize the educational system of the country the Education Act of 1982 was passed by the Batasang Pambansa (National Legislature) and signed into law by the President of the Philippines. This law was created to provide the basic mechanisms for the establishment and maintenance of an integrated system of education at all levels, both formal and informal, and in both public and private schools, relevant to the goals and objectives of national development.

PROBLEMS OF EXPANSION

The Philippines, like any other developing country, is not immune from suffering from the pains of growth and development. In meeting the challenges of expansion, higher education, in particular, has had its share of the tremendous problems spawned within the last four decades. One of the very crucial problems identified during the Conference on Higher Education at the National and Asia/Pacific Levels in connection with the Diamond Jubilee celebration of the University of the Philippines was the inadequate financial support for higher education. In the Philippines, public colleges and universities must depend on government subsidy. It is on record that from 1980 to 1984 state colleges and universities were allocated a meager three per cent of the national budget. No less than a former Education Minister expressed concern over the system of financing higher education. According to him, the present budget system results in the inequitable distribution of financial resources so much so that educational programs and innovations suffer a lot. The Deputy Minister of Education, Culture and Sports, in his keynote speech delivered at the Conference

of Higher Education in July 1983, issued a call for budgetary reforms which will bring about the maximum and efficient utilization of available resources for the benefit of higher education. While government colleges and universities lament the inadequate government support they get, private colleges and universities have to depend solely on fees paid by students for their income. As a consequence, access to private higher education is determined by the individual's capacity to pay. It is common knowledge in the Philippines that private education is several times more expensive than public education. It is projected that by the year 2000 the population of the Philippines will reach 74.5 million. As a consequence, the number of college-bound students will also increase proportionately. With the meager resources available for both public and private sector the biggest problem will be how the schools of higher education will be able to handle increasing number of students seeking admission. More students means additional money for facilities like buildings, classrooms and laboratories, not to mention hiring of more teachers.

Closely related to faculty recruitment is the problem of retention of competent faculty members. Compared with their colleagues in neighboring countries, Filipino teachers at all levels are terribly underpaid. This situation inevitably results in the loss of competent teachers to industrial and commercial companies where they get substantially higher salaries. For very obvious reasons, the same low salary fails to attract the more able and competent instructors and professors. Over the last ten years, enrollment in teacher training has decreased considerably in both public and private schools. Philippine educators are now justifiable worried that if this trend continues, the country faces a shortage of teachers in the near future.

Another concern pertains to teachers' credentials and qualifications. Of the faculty members now teaching at the tertiary level, about 75% are mere baccalaureate degree holders and of those with graduate degrees, only about 2% hold doctoral degrees. It goes without saying that with this stuation, the quality of higher education is being shortchanged.

Aside from the matter of funding, issues related to academic excellence confront higher education. In the process of expansion it is to be expected that a proliferation of schools with uncertain capability of providing quality education is produced. There is also a tendency to have overlapping programs among these schools. To avoid wastage and at the same time maintain quality education, both public and private higher education are spending their resources towards improving the quality of programs in higher education with maximum efficiency. In the UP, review committees

are continually assessing academic programs to insure their relevance to contemporary needs of the country. Private institutions of higher education are pooling and mustering their resources for the upliftment of the standards and quality of higher education in the private sector. The Fund for Assistance to Private Education (FAPE), an organization created for the purpose of financing programs of assistance to private education, has, to date, spent quite a sum for the financial support of accreditation projects of private education. Other projects of the private sector, such as the guidance and testing program (Center for Educational Measurement), the strengthening of graduate studies (Graduate Education Centers) through faculty fellowships and improvement of facilities, are all designed to improve curricular programs and quality of instruction.

PROSPECTS

Aware of the multitude and magnitude of problems and issues confronting Philippine education in general and higher education in particular, educators in both public and private sectors are finding ways and means to alleviate the situation. One strategy which is gaining wide acceptance in the country is the concept of consortium—a system wherein a member institution contributes its expertise and specialization for the common benefit of the participants.

During the middle 60's, operation of Regional Science Teaching Centers was started as a strategy for improving science education in the country. In this scheme, an institution was identified to act as the leader among schools in a region. At present, in Metropolitan Manila region, UP and two private institutions, Dela Salle University and Ateneo University, together with the Asian Institute of Management have joined their forces in order to improve graduate business education through development of instructional materials and mutual accreditation. The Philippine Normal College, Ateneo University and the University of the Philippines are participants in a language consortium for the purpose of improving the teaching of the Philippine national language, Filipino. Judging from the success of this cooperative endeavor, the consortium approach is becoming a viable mode for solving common problems among institutions of higher education in the Philippines.

As to the question of funding higher education, the passage of Education Act of 1982 guarantees that funds will be available from various sources. Under this Act, post-secondary schools will still be allowed to charge tuition and other fees for the improvement of facilities or to accomodate more students. They are also allowed

to accept grants, legacies, donations and gifts.

In addition, government assistance to private schools will be available in the form of grants and scholarships or loans from government financial institutions. The same Act also explicitly authorizes private institutions to engage in income-generating activities for financing their educational programs.

It is happy to note that, despite the tremendous challenges the Philippines faces in its effort to provide education to every Filipino, despite the increasing population of the country and despite the complexities of worldwide knowledge explosion, the educational future of the country looks very promising. Current developments tend to indicate more and closer partnerships between institutions of private higher education and the government. This partnership and complementation between public and private institutions, though not a panacea for all problems, will undeniably encourage higher education to harness all its resources towards the building of a progressive Philippines.

« COMMENTS ON PROF. UMILLA'S PAPER »

Yoshio Hara*

Professor Umilla's article and comments during the meeting were brief but very informative and stimulating. This information leads to a wealth of further discussion. Several points mentioned in the basic information section concerning the situation and activities of Philippine education deserve comment. For example, the Philippine's educational system requires 6 years of elementary schooling and 4 years of secondary schooling for a total of 10 years. This is in contrast to the more common 12 year system which is in use in Japan. This has caused and is causing problems in accepting foreign students from the Philippines. Even more important than this are the problems incurred by the tremendous expansion of higher education in the Philippines. As is well known from UNESCO statistics and other data, there are 5 major countries which are in the midst of tremendous university expansion-the U.S., Canada, the Philippines, Japan and Korea. Focusing on the 3 Asian countries, it is interesting to note that all of these have a large proportion of private universities. I have long been interested in how the private universities in the Philippines are maintained and managed. Some basic information was given in the Umilla paper but I would like to further examine this phenomena.

According to Umakoshi et.al.(in this volume), the number of total university enrollment in the Philippines doubled from 652,000 to 1,276,000 between 1970 and 1980. During the same time period tertiary education expenditures increased from 13.2% to 22.1%. However the total government expenditure for education from 1970 to 1980 dropped from 24.4% to 10.3%. Thus the percent increase of funds for tertiary education was cancelled out to a degree by the drastic decline in total educational expenditure. It seems that the Philippines would thus greatly depend on the private sector. Japan has experienced a similar happening during the 1960's resulting in tremendous confusion within higher education. I would like to have a more concrete understanding about the effect of this expansion on the colleges and universities in the Philippines.

Three points were emphasized by Prof. Umilla related to the expansion of higher education in the Philippines i.e. 1) finance and generation of funds by the universities

* Professor, Tokyo Institute of Technology

and colleges themselves 2) the difficulty in hiring and keeping competent teachers and 3) the consortium. I would like to comment on these points. The first point was quite an interesting one and we will need more information about the results of the Education Act of 1982 which granted colleges and universities the right to "engage in income-generating activities". Will the universities indulge too freely in such activities to the detriment of academics? Or will such activities be managed to the benefit of research and teaching? The second point was closely related to the first one and was concerned with the difficulty in retaining competent teachers. According to Professor Umilla, Philippine teachers at all levels in private and public institutions are terribly underpaid. It is surprizing that this problem exists in the private sector since the tuition costs are "several times more expensive" there. Japan has dealt with the problem of losing competent teachers in the private sector through help from government grants to private universities. Since 1975, the government has subsidized private universities to a maximum of 50% of the running costs (salaries, libraries etc.). This figure is actually closer to 30%. This funding improved the teacher "brain drain: and helped to attract new talent for the universities. Perhaps concentration of government funds to improve teachers salaries would help this situation in the Philippines. Also, this "new freedom to raise funds" given by the government is not enough of a guarantee to insure that competent teachers and professors will be retained.

In the midst of financial difficulties and declining quality in higher education, the idea of Consortia is a noble effort by the universities to insure and improve quality. Professor Umilla mentioned several examples of joint educational endeavors between U.P., a national University and two private universities. This type of joint co-operation between national and private institutions is very difficult in the Japanese system. These consortia are impressive attempts by serious educators, researchers and administrators and something for all universities to learn from.

HIGHER EDUCATION EXPANSION IN KOREA: ITS PROCESS, PROBLEMS AND PROSPECTS

Byung-Rim Koo*
Jong-Chol Kim**

I. Introduction

Although the history of higher education in Korea dates back to 375 A.D. and modern higher education to a century ago, it was not until the end of World War II that a national higher education system in the real sense was introduced in Korea. During the last forty years, Korean higher education has made an expansion at a rate unprecedented by any other nation in the world in the face of many political and social turmoils including the Korean War. As of 1984, 37% of the 900,000 people who are eligible for higher education are benefiting from higher education in Korea. It can be safely stated that Korean higher education is on the higher level of the mass education stage, to borrow Martin Trow's term. Against this backdrop, arguments in favor of qualitative growth and quantitative control are the major issues being discussed at both government and university levels.

In Korea particular emphasis has been placed on the education of the people in an attempt to make up for the country's scarcity of natural resources. As a result, it is generally believed that the economic growth that Korea has achieved in recent years is in a great measure due to cultivation of manpower. The economic achievement, however, has not yet paved the way for provision of adequate financial resources for improvement of educational conditions.

It is true that the expansion of higher education has made a great contribution to the social and national development of Korea by inculcating the sense of national self-identity, increasing national income, and universalizing educational opportunities. It is no less true, however, that the excessively rapid quantitative growth has resulted in not a few conflicts and problems.

II. Rapid Expansion of Korean Higher Education and Its Major Causes

Korean higher education has witnessed a phenomenal expansion since the nation gained liberation in 1945. The number of higher educational institutions has

* Council Specialist, Korean Council for University Education
** Professor, Seoul National University

increased from 19 in 1945 to 233 as of 1984. In terms of student population, Korean higher education has increased to 1,177,597 in 1984, which represents an increase of more than 150 times compared with the higher education population in 1945, when there were only 7,819 Korean students. It has come to such a point that now graduation from a college is no longer a sure guarantee for a decent job. The expansion of higher education during the period, 1945-84, as classified by various categories, is shown in the table below.

Table 1. Quantitative Growth of Korean Higher Education, 1945-84

Year	Short-term and Junior Colleges		Four-year College & Universities		Graduate Schools		Total		Growth Rate
	Institutions	Enrollment	Institutions	Enrollment	Institutions	Enrollment	Institutions	Enrollment	
1945	(Data not available)				—	—	19	7,819	1
1950					—	—	55	11,358	1.5
1955	25	14,972	44	78,649	—	—	69	93,621	12
1960	29	14,754	52	92,930	—	—	81	107,684	14
1965	61	29,079	70	105,643	37	3,842	131(37)	138,564	18
1970	81	22,492	71	146,414	64	6,640	152(64)	175,546	22
1975	116	52,531	72	208,986	85	13,870	188(85)	276,387	30
1980	139	161,018	85	402,979	121	33,939	224(121)	597,936	76
1984	123	230,283	110	884,452	186	62,862	233(186)	1,177,597	151

Source : Ministry of Education Statistical Yearbook of Education, 1963-84
Notes : Miscellaneous Collegiate Schools and the College of the Air and Correspondence are excluded.

Even when we allow for the fact that all nations, both developed and less developed, have witnessed a rapid increase in higher education population, the explosive growth that Korean higher education has recorded in terms of student population is extraordinary, though the results of this increase have not always been positive. Factors causing the tremendous increase are varied and many, but, for illustrative purposes and space considerations I will briefly discuss some of the most prominent causes.

First, the expansion in higher education is attributable to the continuous growth in population resulting from the hike in birth rate and life expectancy, and the growth in the percentage of enrollment at all school levels. Notwithstanding the ongoing campaign for family planning, the population still grows at an annual rate of 1.6%.

Secondly, another contributing factor to the boom in Korean higher education

is the strong desire of Koreans for upward social mobility and higher income. The recipients of higher education get considerably higher economic returns in comparison with non-college graduates. This, coupled with a variety of privileges and social prestige bestowed on college graduates, has been a strong incentive for aspiring for higher education.

Thirdly, betterment in standards of living, coupled with the open door policy of colleges and the relatively low tuition and fees, has made a positive impact on the growth of higher education. In recent years, Korea has made considerable economic progress and as a result living standards of its people have substantially improved. Irrespective of this economic betterment, the government has been exercising de facto regulation over tuition and fees in an effort to keep prices under control and to grant equal opportunity for education. This has resulted in a sharp decrease in the number of high school graduates who give up university education for economic reasons.

Fourthly, the educational policy placing emphasis on cultivation of manpower, a remarkable overseas manpower export, and sharp increase in the demand of highly-qualified manpower in the wake of industrialization, etc. combined have contributed to an extraordinary expansion of the higher education population since the end of the 1970's.

Lastly, the present low level of job opportunities has paradoxically stimulated the desire for further higher education. Prospects of getting secure employment have given high school students a strong incentive for higher education. This phenomenon, spurred by ever growing competition for jobs, has now escalated to college graduates, and the recent increase in the number of those who go on to graduate schools has much to do with the situation where supply of manpower by far surpasses its demand.

The socio-cultural background so far mentioned and the keen desire for college education combined have resulted in certain characteristics in Korean higher education. Colleges and universities have come to give priority to job-oriented training over academic and research functions. They have also been compelled to introduce large-unit classes and what we call the "theater-style college" to accommodate the ever increasing number of students. In addition, the wide discrepancies in academic quality among institutions of higher education have incurred a variety of government regulations aimed at narrowing the gap in standards. This government control, in turn, has weakened the autonomy of individual institutions and has given rise to sharp

competition rather than constructive cooperation among higher learning institutions.

Another characteristic inherent in Korean higher education is that private institutions constitute the mainstream in higher education, as the table below indicates.

Table 2. Status of Higher Educational Institutions, 1984

	Short-term and Junior Colleges		Four-year Colleges & Universities		Graduate Schools		Total		Enrollment Ratio (%)
	Institutions	Enrollment	Institutions	Enrollment	Institutions	Enrollment	Institutions	Enrollment	
National	17	24,967	31	240,725	39	18,242	48	283,934	24.0
Public	—	—	1	4,713	2	176	1	4,710	0.5
Private	106	205,316	78	639,014	145	44,444	184	888,774	75.5
Total	123	230,283	110	884,452	186	62,862	*233	1,177,597	100(%)

* Graduate Schools are excluded

The predominance of private institutions has resulted from the fact that the nation's financial situation can not afford to accomodate the mushrooming college aspirants in national or public institutions. The private institutions of higher learning generally started as junior or two-year colleges and developed into four-year colleges and then comprehensive universities. The development process being almost the same, private colleges and universities share more or less the same traits and lack distinctively individual characteristics. To be brief, Korean higher education is marked by lack of diversity and variety except for quality and prestige.

III. Problems in Higher Education Expansion

The enlargement of the university student population unaccompanied by due improvement in educational elements has brought about the worsening of educational conditions. As the rise in the aggregate educational expenditure lags far behind the hike in its cost, colleges and universities are facing serious financial difficulties. And the financial plight common to most colleges and universities has naturally had a negative impact on overall educational conditions.

The explosive growth in the collegiate population has also led to a shortage of faculty, facilities, and other educational resources, adversely affecting the sound development of higher education. In addition to the problems that I have mentioned so far, the sudden expansion has occasioned the ever-enlarging ratio between faculty and students, which currently stands at an average of one to thirty-five in the case

of national or public universities and one to forty for private ones. This widening ratio has decreased the personalized contacts between the faculty and students and thus it is another major factor in worsening the gap of problems in Korean higher education.

The deterioration in the educational conditions has placed academic excellency in jeopardy. With the introduction of large-unit classes, which has been made inevitable due to the shortages of faculty and facilities, there has been a decline in the quality of instruction and academic counseling. To make matters worse, the college entrance system in Korea encourages the rating of colleges and universities. This has engendered a situation where the social reputation or esteem of a university takes precedence in the application rather than student's aptitude or academic interest. As a result, colleges and universities find it difficult to satisfy the academic desires of students and to develop their potentialities. Instead, they have been degraded to a mere necessity for employment. Under these circumstances, it seems to me that excellency, diversity, and an open access, which constitute the essentials of higher education, are suffering a setback in Korean higher education.

Despite the expanded opportunity for higher education, approximately half the aspirants fail to go to colleges. Of the total applicants, which stand around 700,000 annually, approximately 30% are admitted to four-year colleges and 15% to two- or three-year junior colleges. Most of those who fail to enter a university choose to repeat the entrance examination, making the repeater's problem a chronic social problem. And the overall competition ratio of four-year colleges is as high as four to one even for newly established colleges in local areas. Also those admitted to colleges are not without problems. The decrease in the quality of college students resulting from the expanded quota for college enrollment, and the deterioration of educational conditions have made it difficult to maintain academic excellency in colleges. In an effort to maintain academic excellency, the government introduced the so-called "graduation quota system", which requires that 30% of the entrants above the quota will be forced to leave in the course of their college study. This mechanism, however, failed to attain its intended purpose by applying the same criteria to all universities, ignoring the wide range of discrepancies that exist among higher education institutions in terms of academic quality. The system has recently been modified to allow individual institutions to decide the percentage exceeding the graduation quota, varying among departments.

Due to the variation in quality, there still exists lack of confidence in higher

education in the business community. Business corporations have a preference for the graduates of some highly regarded colleges and universities and do not grant equal opportunity to the graduates of all institutions. As college graduates increase in great numbers, their chances of getting a decent job are becoming slim. This year, a large portion of them are expected either to be unemployed or to be employed with underpaid jobs.

This current situation, together with the benefits in military service bestowed on the master's degree holders, has tended to encourage students to aspire for graduate school education. It is well reflected in the tough competition ratio of certain departments, which in some cases is in excess of ten to one. It is feared that the quality of graduate education may suffer, repeating a similar process to undergraduate education.

Whether the excessive enthusiasm for higher education is desirable in the Korean context remains to be studied further.

IV. Future Prospects and Policy Directions

Future prospects of development in Korean higher education are shrouded with a considerable extent of uncertainty due to such variables as demographic, political, economic and socio-cultural factors. On the basis of general projections and future-oriented judgments, however, some observations may be made as follows:

a) Social demand for higher education is likely to continue to increase, bringing forth increasing pressure for expansion. Explosion of population, universalization of secondary education, rising expectations of the populace, etc. will tend to press for such a trend.

b) The absorption power of the market for the products of higher education may be uncertain, possibly resulting in a widened gap between supply and demand for high-level manpower. While in some sectors shortages of well-qualified high-level manpower may be conspicuous, in other fields over-supply may become more problematic.

c) Despite the popularization trend, pursuit of excellency in higher education is likely to be emphasized more strongly and continuously. Since not all institutions of higher education can attain excellence in their performance, a kind of institutional hierarchy is likely to persist despite accelerated efforts for qualitative improvement on the part of nearly all institutions, national or private, central or local.

d) Scientific-technological sectors are likely to attract greater policy attention and

public support primarily due to greater attention given to promotion of science and technology. This is so in spite of the strong voices raised in some academic corners to the contrary, that is, the persistent claims for a more balanced development between humanities and social sciences on the one hand and natural sciences and technology on the other hand.

e) Increasingly greater attention is likely to be given to promotion of graduate education to meet the demand of high technology society. Graduate education-centered universities may well be developed, similar to those in more advanced nations.

f) Private higher education is likely to continue to play an important role in the overall development of Korean higher education. As of 1984, private institutions accommodate three quarters of the higher education population. Consequently private institutions are bound to press for both greater autonomy and greater support, which will be difficult to disregard for both educational and financial considerations.

These prospects are based on the fundamental assumption that development of higher education in Korea as elsewhere in the world is considered as essential and critical for both high-level self-actualization of individuals and for national development. There was a time when production of unemployed intelligentsia was a great social problem, causing social unrest and this may well be repeated in the future. Excellency vs. expansion is one of the major controversies facing Korean higher education today, which may be regarded as a sign of fear for such a possibility in some corners. The problems have been elaborated by Dr. Koo, and need not be reverberated.

On the basis of these observations as to the future prospects of higher education in Korea, some attention will now be given to specific policy directions for solutions of the existing problems and those expected to arise from the foreseeable prospects. In this connection it should be made clear that only some general directions and guidelines will be suggested, which are neither comprehensive nor free from subjective judgments; and that there is no panacea.

It is our considered opinion that the following policy directions are of greater significance in meeting the present and future problems which Korean higher education is now facing or is going to face in pursuit of its development:

a) Greater and more exactly concentrated attention should be given to pursuit of excellency, providing for relevant programs, adequate and well-qualified faculties, and modern facilities and equipment. Improvement of quality in higher education will naturally involve improvement of instruction at lower level schools, more

selective process of admission, and strengthening education/vocational guidance on the secondary school level, etc. It will also involve allocation of a greater amount of financial resources for higher education, although it occupied 31% of the total cost of education as of 1982.[1]) Particular attention should be given to strengthening such strategic areas as scientific-technological programs and graduate education.

b) Greater autonomy, involving both institutional and individual freedom, should be guaranteed. This means freedom from bureaucratic control, conformity and formalism which tend to suppress free flow of critical and creative intelligence. It should become a core ethos of an academic community. Naturally it means self-discipline and self-control; it by no means indicates lack of order and discipline. Due to long tradition and convention it cannot be fully accorded overnight in Korea. There must be certain procedures through which it can be actualized step by step. For example, self-disciplined institutions should be first guaranteed a greater extent of autonomy, with this being progressively expanded. The Korean Council for University Education established in 1982 may well prove an effective organization for promoting autonomy bridging between the Ministry of Education and higher education institutions concerned.

c) Both inter-university and college-industry cooperation should be encouraged and supported. Some forms of consortia activities do exist now and cooperative education has been institutionalized since early 1970's in some vocational colleges. In general, however, it has not been widely implemented, due to prevailing Monroeism and lack of practical support. The aforementioned Korean Council for University Education may also become a vehicle bridging separate institutions, academic and/or industrial, for the purpose of accelerating such cooperation. It has already made some initial movements in that direction.

d) The existing wage structure affording nearly 3.5 times as much income for college graduates as middle school graduates and 2.3 times as compared with high school graduates should be reorganized, although the industries may be reluctant to go along.[2]) Aspiration for college education should somewhat be cooled down by strengthening educational/vocational guidance on one hand and by way of restructuring the wage structure in general on the other hand. Under the existing circumstances one can hardly resist aspiring to enter college by any means.

e) Strengthening support to private higher educational institutions is urgent due to two facts: first Korean higher education depends too heavily on private institutions;

secondly most private higher educational institutions are actually suffering from financial difficulties, creating conditions of inequality between government-supported and private higher educational institutions. In general Korean private higher education institutions depend upon student fees for 90% of their current expenditures.

f) The rather rigid student quota system implemented with authorization of the Ministry of Education should be substituted by a more rational planning and more flexible implementation, reflecting emerging social needs and manpower requirements at least in some limited areas, such as teacher education and medical education. The manpower approach to planning higher education does have limitations. In certain areas, however, it should be taken into consideration to a considerable extent. And it is needless to say that feasible planning will only guarantee successful implementation.

g) Underutilization of woman power, unequal and unfair economic opportunity for local universities, etc. should be discontinued as quickly as possible. Curricular relevancy in terms of social and economic needs should be enhanced, although the humanistic tradition cannot, and should not be done away with. Higher education in general should be more closely linked with employment and the world of work, although admittedly mere economic returns cannot, and should not be the sole purpose of higher education.

V. Concluding Remarks

In this paper we have attempted to describe the rapid growth of higher education directed towards popularization in Korea along with its background factors, to analyze some of the major problems accompanying such a trend, and finally to suggest some directions for solutions of those problems as well as meeting the emerging challenges anticipated. We are of the opinion that the popularization trend cannot be rolled back, returning to the elitist stage, and that problems and prospects should be met on a realistic ground as intelligently and effectively as possible. The three most critical factors in this connection may be improvement of quality involving accompanying conditions, better linkage between higher education and employment structure, and more adequate financial support. And it is noteworthy also that these are most difficult conditions to meet. Under the given circumstances of limited marketability for products of higher education and financial constraints we can only hope to improve the situation progressively, approaching to better solutions of the problems through incremental changes both within the academic community and outside it.

Many a problem facing Korean higher education cannot be expected to be resolved without cooperative efforts among the government, universities, and the surrounding community including business, the press and other institutions. Although Korean higher education has made remarkable progress in the last 40 years, it has a long way to go in pursuit of excellency relative to research, instruction and public service functions. While there are two opposing views as to its future, one optimistic and the other pessimistic, we are of the opinion that it will largely depend upon our own efforts to make it tick. In our joint efforts to meet the challenges we must be concerned with maintenance, growth and adaptation of the whole system, directed towards greater autonomy, cooperation and excellency, and improvement of both internal and external efficiency. It is a great challenge to us struggling for a better system of higher education, perhaps under the most difficult circumstances among the nations represented here.

Notes

1) Yoon Jung-Il, et al., *Status and Problems of Educational Financing in Korea,* KEDI, 1982.
2) Lim Jong-Chol and Bae Mu-ki (ed.), *Labor Economics in Korea,* Seoul: Moonhak & Chisung Sa, 1980. p.117. More recently the gap is progressively narrowing.

« COMMENTS ON DR. KOO AND PROF. KIM'S PAPER »

Toru Umakoshi*

I was most impressed by the rich information and analysis in the presentation by Prof. Kim and Dr. Koo. In general I am quite in agreement with the information in the paper.

I would like to make four brief comments from my perspective as a Japanese studying Korean education and then ask two questions.

1) The Effects of Secondary Education Reform on Higher Education in Korea

In regard to the causes of expansion, as Dr. Koo pointed out I understand the economic development and the educational fever of present day Korea are very important for higher education expansion. However, I would like to see more emphasis put on the relation between secondary and higher education, particularly the reform of the entrance examination system since 1968.

When the entrance examination to middle school was abolished, this was followed by the reform of the high school entrance examination. Such reform was carried out for the purpose of equalization of educational opportunity. Now it is something like the lottery system. Due to these reforms higher education enrollment dramatically increased. I think these progressive programs should be encouraged.

2) Quality of Higher Education

My second comment is on the quality of higher education. Dr. Koo did not refer to the Pilot College method. I think this new concept carried out in the 1970's was quite important and needs further mention. I think the results of this reform are very significant but I also think the members of the colleges and universities which participated in this kind of reform were limited to the so-called "elite" universities. These methods were not necessarily supported by Korean professors all over the country, only by an elite segment. In connection with the second comment, in regard to the graduation quota system, I don't think it is such a useful or effective method for improving the quality of Korean higher education and in fact it may be counter-productive. Korean universities just like those in Japan have various levels of prestige and

* Associate Professor, R.I.H.E.

productivity. Let us imagine what would happen if one-third of the students from the top five Korean universities were suddenly cut. Obviously this would be disastrous to the pool of extremely talented potential young scholars and educators, and would hurt the development of Korea.

3) The Function of the Graduate School

For my third comment, in regard to the section on Prospects of Higher Education, I would like to take up only 1 point, concerning the function of the graduate school. Dr. Kim pointed out that the strengthening of the function of graduate school is important for building up the high technology sector. A more important function of the graduate school, however, is to produce more university teachers to meet the needs of a greatly expanded student population. It seems most important to strengthen the doctoral level course. University professors, especially elite ones, are mostly products of American graduate schools, thus Korea is highly dependant on American graduate schools. However, in the future the Korean graduate schools should produce more and better university teachers. And in connection with this point, it is also very important to strengthen the research function of the university.

4) Policy Direction

Although Dr. Kim pointed out a big difference between wages according to school careers. I think it needs to be emphasized that there is a great difference between the salaries of high school and university graduates. According to statistics from the Korean Labor Ministry, the difference is 1 to 2.5 in comparison to Japan's 1 to 1.2 in terms of starting salary. This wage difference causes great pressure on Korean young people to enter colleges and universities. In the future this wage difference should be decreased, if not there may be a large segment of society which is overeducated. Finally I would like to ask two rather naive questions:

First I would like to know more about the role and function of the K.C.H.E which Dr. Koo belongs to. I understand this Council was established to help keep autonomy for the universities and also to serve as an accreditation agency. But from a comparative view point, the Japanese Accreditation Council did not function at all after World War II. Second, at the beginning of the 1980's in the constitution, founded in 1981, a provision of lifelong education was first set down. In connection with this I would like to know more about the prospects of short-cycle higher education, particularly the development of Junior Vocational Colleges.

DEVELOPMENT AND REFORM OF CHINESE HIGHER EDUCATION

Wang Yingjie*

1. Tremendous Expansion Since 1977

The 1966—76 "Cultural Revolution" drove the Chinese higher education system almost to the point of crumbling. But since that bleak period, the Chinese government has taken up the "Realization of Four Modernizations (modernization of industry, agriculture, national defence and science and technology) as its strategic national goals. As it was recognized that development of education constituted a base for the "realization of Four Modernizations", the budget for education has been greatly increasing and consequently higher education has expanded dramatically.

The government expenditure on capital construction for higher education was only 115 million yuan in 1977, but it increased to 1061 million in 1982; that is more than 800% increase over five years (see Table 1). Because of this increase, the old colleges and universities expanded their potentialities to house a greater enrollment and a considerable number of new higher education institutions were built. In 1976 China had only 392 colleges and Universities with 565 thousand students. And there were 805 colleges and universities with 1.24 million students enrolled in 1983 (see Table 2). The total enrollment increased 120%.

Graduate education has experienced a great expansion, too. There was graduate education before 1966, but there were very few graduate students and there was no degree granting system. Even worse, this system was wholly dismantled by 1969. Graduate education made its recovery in 1978 and the degree system went into effect in 1980. There were 30,013 students in master programs and 546 in doctor programs in 1983.

Besides the expansion of traditional colleges, 52 two (or three) year vocational colleges were established. The enrollment at these schools was 14.2 thousand students in 1983. They implement totally new policies. For example tuition is charged, students are all commuters, and the specialities offered are all ones which are vital to the areas where the colleges are located. Graduates are thus quite welcomed by the employers, though the governments do not assign them jobs.

* Research Associate and Associate Director of the Institute of Foreign Education Research, Beijing Normal University, China.

Table 1. Public Expenditure for Capital Construction in Higher Education Institutions (in thousand yuan)

(1977-82)

Year	1977	1978	1979	1980	1981	1982
Expenditure	115,120	334,150	684,450	900,280	101,480	1060,760

Table 2. Number of Formal Colleges and Universities and Enrollment

(1976-1983)

Year	1976	1978	1981	1982	1983
Colleges and universities	392	598	704	715	805
Enrollment (in thousand)	565	856	1280	1154	1244

Table 3. Number of Adult Higher Education Institutions, Number of Graduates, Number of New Entering Students, and Enrollment (In thousands)

(1983)

Type of institution	Institution	Graduate	New entering students	Enrollment
All institutions	1196	238.8	478.2	1128.4
Broadcasting and T.V. university	29	133.5	250.0	478.8
Worker's university	841	33.2	56.8	173.3
Peasant's university	4	0.4	0.4	0.8
Administrator in service training college	15		1.7	1.9
Teacher in service training college	304	52.2	79.2	201
Correspondence college	3	2.7	1.4	8.1
Correspondence division and night university in formal colleges and universities	378	16.8	88.7	264.5

88 colleges and universities admitted 4581 contract students in 1983. This experiment led to a very positive response from enterprises and even individuals, as they all need professionals to develop their business. And the colleges could get more funds in these ways.

A new role that the colleges assume is cadre in-service training. There were 38,952 cadres enrolled in 1983, who usually take two year leaves from their jobs.

Adult higher education is going through a period of great expansion, too. There were 920 thousand adults enrolled in all types of adult higher education institutions in 1983, mainly in broadcasting and T.V. universities, worker's universities, peasant's universities, correspondence colleges and teacher in service training colleges, etc. (see Table 3)

2. Reforms and Future Development

The expansion of our higher education contributed to the development of the Chinese economy. But now, as economical reforms in rural areas have developed further and have begun in urban areas, higher education does not suit the needs of the economical development. So further reform in higher education must indeed be continued.

1) Reform in the Higher Education Administration System

Our current administration system is very centralized. Establishment of new higher education institutions, budget and expenditure, admission and job assignment, faculty hiring and promotion and so on are all controlled by the central administration. This system neither encourages local governments and enterprises or individuals to invest more in higher education nor does it help higher education institutions in rapidly reacting to the changing needs of employers.. The trend of the reform is decentralization. Local governments will be given more rights and colleges and universities will be more autonomous. The main responsibilities of the Ministry of Education will be fundamental policy making, long range planning and fund allocating, etc.. The colleges and universities will have the right to decide on faculty hiring and promotion, expenses and other important matters.

Within higher education institutions, the "president responsibility system" will be adopted i.e. presidents will take full responsibility for administration of their institutions. The party secretary will only take a role of guaranteeing and supervising party guidelines.

2) Reform in the Higher Education Structure

The proportion of the students enrolled at different levels of higher education

is presently not reasonably balanced. There are too few student enrolled in specialized junior colleges. The role of these colleges is not so clear-cut thus they try everything to turn them into four year colleges. The total amount of graduate students is too small too. This relatively single structure obviously does not fit the demand for different level professionals if we consider the current flexible economical structure.

Let us take 1983 as an example. The students enrolled in the specialized junior colleges represented only 23% of total college enrollment. The has led to the abnormal phenomena that there are several times more engineers than technicians in our enterprises. Therefore, we need to pay more attention to the expansion of the specialized junior colleges in the future development of higher education in order to meet the urgent demand for applied technical personnel. Our target is that the proportion of these students rise to 30% of total college enrollment in 1985.

Graduate education in China is still in the beginning period of recovery. We should accelerate its development in order to satisfy the demand for faculty members and senior professionals.

Reforms are necessary to help regulate the balance of majors. For many years we have neglected humanities and social sciences. All students majoring in humanities and social sciences (including those majoring in business, law, arts, etc.) constituted only 20.2% of total enrollment. There is a special shortage of students majoring in applied social sciences, such as business and law. Now the development of socialist democracy and the improvement of economical efficiency are impaired to some extent by this shortage. We will try our best to develop our social sciences and humanities education and to build a social sciences and humanities education system with all major disciplines, and with a reasonable proportion between applied fields and other fields in the remainder of the 1980s.

We have overemphasized disciplines related to heavy industry so much that there are not enough students majoring in agriculture and light industry related fields. In 1982, students majoring in agriculture represented only 5.6% of total enrollment, but those majoring in engineering constituted 34.5% (see Table 4). And newly entering students majoring in light industry related disciplines make up only 3.3% of the total of newly entering students. As the order of our economical development now is agriculture, light industry and heavy industry, we must enlarge our enrollment of students majoring in agriculture and light industry related disciplines.

3) Reform in Admissions and Job Assignments

Since the reestablishment of the nationally unified college entrance examination

Table 4. Percent of Undergraduate Students in Different Major Fields of Study (1949-52)

Year	Total percent	Engineering	Agriculture forestry	Medicine	Education
1949	100	26.0	13.4	13.1	10.3
1952	100	34.8	8.0	13.0	16.5
1965	100	43.8	9.4	12.3	14.0
1977	100	33.4	9.7	15.0	26.4
1978	100	33.6	7.2	13.2	29.2
1982	100	34.5	6.6	14.2	25.1

Year	Total percent	Humanities	Science	Business economics	Law	Physical education arts
1949	100	10.2	6.0	16.6	6.3	2.6
1952	100	7.1	5.1	11.5	2.0	2.1
1965	100	6.8	9.2	2.7	0.6	1.2
1977	100	5.6	6.7	1.3	0.1	1.5
1978	100	5.4	7.5	2.1	0.2	1.6
1982	100	5.1	7.0	4.8	0.3	1.3

system in 1977, the quality of higher education has been greatly improved, but at the same time certain defects have been revealed. This highly selective system has had some negative effects on the quality of secondary and primary education. It has pushed primary and high schools to overemphasize knowledge transmission, sacrificing ability and skill training, moral values and physical development to some extent. Certainly only after higher education is developed to the point where most young people can have access to colleges, can this problem be considered solved. But at the present, reforms are still needed for setting new expectations for high schools. We should give more weight to applicants' GPA as well as other aspects of their high school performances when admission is granted. Colleges should allow high schools to recommend a few really outstanding students to enter colleges without taking entrance examinations. Outstanding young people with working experience should be given some preference when they apply for colleges. Last but not the least, we need to admit more students from rural, frontier, and minority areas, cutting down some admission requirements on the condition that they return to these areas when they graduate.

Our college graduates have always been assigned jobs by the state since new China was established. While all graduates can have a job immediately after graduation and the demand for professionals from critical national enterprises can be guaranteed in this way, there are serious problems. In theory, the assignment is given

according to the national personnel plan but sometimes it falls in blindness. Small towns, rural areas and cooperative business can hardly get college graduates. Besides this, some students lose their motivation when they get into college because they know they will receive a state guaranteed job after graduation.

To reform the job assignment system, outstanding graduates should be given job preference, some students should be allowed to find jobs by themselves, and graduates should be encouraged to go to work in frontier areas by providing them a higher salary. But as our economy is basically a planned economy regulated by a market to some extent, job assignments will still be basically planned by the state although somewhat more regulated by the labor market than before. So a reasonable assignment plan is needed. To improve the assignment plan, direct dialog between employers and colleges is needed so that colleges can become more aware of demands.

4) Reform in Instruction and Curriculum

Though the quality of our higher education is not bad in comparison with world standards, there is still much room for improvement. Modern science, technology and modern production require that today's experts possess much broader academic background, creative thinking ability, life long learning ability and problem solving ability and skills. It is a new challenge for higher education institutions to provide broader knowledge and enhance those abilities. As to curriculum, we need to strengthen core courses, reducing a certain number of courses in majoring fields, and increase elective courses reducing required courses. To reform instruction, we have to reduce lecture time in order for students to have more time for seminars, experiments, internships, and independent study. It is very important to have students involved in research as early as possible. The basic point here is to get students more involved in their learning and more responsible for their own learning. To improve the quality of higher education is to build a strong base for its further development.

5) Further Development of Teacher's Education

According to the statistics, nearly one third of our high school teachers are not qualified. This situation is made even worse by the fact that there are less students willing to apply for teacher's colleges. If we do not reverse this trend, there will be a real educational crisis by the end of this century, as high quality senior teachers will retire, and new teachers may not be as qualified or dedicated as those who will leave. Such an educational crisis would severely impair the realization of the Four Modernizations.

What we must do first is to improve the social status and salary of our school

teachers where the teaching profession will become the most attractive and admired career in the society. Secondly, we must improve the quality of teacher's education while we increase the number of teacher's colleges. Only after quality is improved can teachers get more respect and gifted students be attracted. To improve the quality, admission requirements should be tighter and the teacher-preparation programs should be more rigorous academically.

6) Further Development of Adult Higher Education

China is a huge country with a population of one billion. Whatever efforts we make, it is impossible for us to provide opportunities for all applicants to our formal higher education institutions by the end of this century, not to mention the need for people with higher education to get in-service training in order to catch up with the rapid developments in science and technology. Thus, we must greatly develop adult higher education by all means. Our target is to get 2.37 million adults enrolled in all kinds of informal higher education institutions by the year 1987.

Though higher education in China has been expanded tremendously since 1977, it still can not meet the needs of political, economical and cultural development. According to the census in 1982, there were only 5.99 persons with higher education in every thousand people in China. This proportion is certainly very low in the world. Our higher education will get more funds along with the development of our economy. So there is both the need and the possibility to develop our higher education further. We expect to enroll 5 million undergraduate students in all kinds of higher education institutions (including adult higher education institutions) and 100 thousand graduate students by 1990.

The rest of the 1980s will be years of reforms and development for Chinese higher education. Chinese higher education will have a very bright future and we are very confident in facing future challenges.

« COMMENTS ON PROFESSOR WANG'S PAPER »

Yutaka Otsuka*

It is a great honour for me to make some comments on Professor Wang's presentation. It is certain that dramatic and drastic changes in Chinese higher education have been occuring in the recent post-Cultural Revolution era. Not only conditions in Chinese higher education but in every part of Chinese education. In fact things have changed so much that I always have great difficulty in keeping up. If one intended to write a paper on the various aspects of educational reforms in China, it seems no exaggeration to say that such a paper would have to be rewritten every three or four months.

Today, Professor Wang has provided us with a wide range of information on the recent reform and trends in Chinese higher education which is indeed a good basis and starting point for our further discussion. First of all, I would like to thank Professor Wang for that. But at the same time, I had a feeling that I would have appreciated it more if he had had given us more detailed information on each of the issues mentioned in his paper, simply because all of them were very interesting to me indeed. Anyway, the general view he showed us was bright and hopeful enough as symbolized by his ending remarks and lead us to believe in a promising future for Chinese higher education. However, if we scrutinize each of the issues one by one, they all involve some sorts of problematic aspects. I may have to refer to each of them. But instead of doing so, I would rather subjectively take up a few issues of personal interest to me and comment on those which puzzled me a little during his presentation.

Speaking of expansion, just before coming to Hiroshima, I tried to calculate the annual growth rate of enrollments in Chinese higher education in recent years. The rate for 1978-83 is approximately 7.8% per annum. I know it is not an easy job to obtain an absolute indicator valid enough to define the term "expansion" itself. If you take the annual increase rate of enrollments, for example, exceeding a certain percentage, e.g. 5 percent, this could be considered as "great expansion" in some countries but not in others. Nevertheless, an annual growth of 7.8% is by no means small. As noticed in this figure of the growth rate of enrollments, China has been

* Researcher, National Institute for Educational Research

quite successful in expanding its higher education in accordance with the so-called "four modernizations policy".

In order to support such an expansion, it seems to me that physical factors such as having new university building or installing necessary equipment are relatively less important, although not an easy task at all. But even more important then these are human factors, i.e. teachers. I remember an article written by Professor Zhang Wen-yu of Shanghai Normal University (*Gaodeng Jiaoyu de Lishi he Xianzhuang* or *History and Present Conditions of Higher Education,* Hunan University, 1980, p.28). According to him, although the nominal teacher-student ratio at Chinese universities and colleges is as low as 1 : 4.3 (1980), less than half of the existing teachers are capable of taking responsibility for teaching as professionals, due to various causes such as poor health, age, as well as a lack of appropriate training. Before these problems have been adequately dealt with there is an expansion of enrollments. I wonder how China has been resolving the difficulty of maintaining and hopefully raising the quality of teachers. Also surprisingly enough statistics indicate that number of teachers increased almost double for the same period of time. Here again I am very much interested in the measures China has taken to maintain the standard of teachers and to recruit them so fast.

Secondly, Professor Wang referred to the trend of reform in the systems of administration and went so far as to mention a presumption that in the future universities and colleges would not belong to any Ministry. I understand that some people in China have recently asserted slackening control, i.e. that universities and colleges should be independent. However, government control with a resulting increase in autonomy is one thing but being completely independent is another. As for this point, I would like to know if there is any concrete evidence to support such a presumption.

Thirdly, when it comes to higher education in China, we have to consider not only the regular full-time institutions including 2 to 3 year short-cycled ones but also various types of institutions for adult higher education such as TV universities, workers-peasants universities, special in-service training institutions for teachers, etc. Those enrolled in the latter are more than one million. This number is almost equal to that of regular full-time institutions. It is such types of institutions that many developing countries are much more concerned about. Fortunately China is far ahead of many countries including developed ones in terms of experience in managing such institutions. For example, TV universities started in the early 1960's, when the Japanese had not yet taken into consideration the establishment of the University of the Air.

I believe that China has a wealth of experience which she can share with other nations. As to these institutions, what I am most keen to know is how the credentials imparted by these institutions are accepted by the society, or how employers and the society as a whole deal with the graduates from these institutions. I know that China has been making efforts to strengthen and raise the quality of adult higher education and accept the certificates obtained through various opportunities of adult higher education as the equivalents to those of the regular institutions. But I would welcome Professor Wang's further explanation on this matter.

WHY ASIAN OVERSEAS STUDENTS PREFER THE UNITED STATES

William K. Cummings*

In 1963, Asians made up 41.6 per cent of the foreign students in the United States; by 1978, they had become 55.7 per cent of the total. The tendency towards a predominance of Asians in the United States is, according to Smith et al. (1981: 195), complemented by other patterns of regional and/or country specialization; Africans in France, and Europeans in Austria, Switzerland, Italy, Belgium and Denmark.

In Table 1 focusing on 1963 and 1978, the two post-war years for which the data is most reliable, we show the major destinations of students from each of 34 Asian countries. In 1963 in only five of these countries did the majority select the United States as their place of study. By 1978, the United States was selected by a majority of the students of ten countries; the Philippines (80.8%), Saudi Arabia (79.6%), South Korea (77.4%), China (73.6%), Japan (72.9%), India (70.6%), Iran (66.8%), Thailand (59.7%), Pakistan (54.3%) and Kuwait (50.3%). In six other Asian countries, at least one-quarter of the students selected the United States as their place of study.

In an earlier paper (Cummings, 1984), we outlined the two theoretical perspectives that have stimulated most of the recent thinking on educational issues. The *interdependence* approach stresses the increasing interconnectedness of nations while the *development* approach stresses processes internal to nations. In accounting for the tendency of Asian overseas students to select one target for their studies over others, we will be elaborating primarily on the logic of this first approach. While global interdependence has increased, the linkages of most Asian states with the United States have become especially strong. Several of the strengthened Asian-American links have important bearing on educational exchange; in particular we think of:

(1) Improving Asian-American political links
(2) The increased volume of Asian-American economic exchange
(3) The sharp increase in Asian immigration to the United States
(4) The increasing similarity in the structure and content of Asian and American educational systems
(5) The absorptive capacity of American higher education.

* Senior Specialist, East-West Center, Hawaii

Tabel 1.A. Number of Asian Students in Major Receiving Countries, 1963

	USA	UK	Australia	Canada	Philippines	Japan	Germany (F.R.)	France	Sub-total (X1)	Total sent (X2)	X1/X2 (%)	USA/X2 (%)
Afghanistan	166	7	0	0	0	1	65	39	278	419	66.3	39.6
Bahrain	1	6	0	0	0	0	1	0	8	194	4.1	0.5
Bangladesh	—	—	—	—	—	—	—	—	—	—	—	—
Burma	158	50	28	15	7	19	7	3	287	420	68.3	37.6
China (Taiwan)	5,526	20	29	197	4,086	1,586	224	158	11,826	12,045	98.2	44.4
Hong Kong	3,143	251	1,283	761	0	5	6	0	5,449	5,478	99.5	57.4
India	6,387	1,543	111	508	46	7	1,109	81	9,792	10,394	94.2	61.4
Indonesia	0	29	238	0	14	345	480	35	1,141	2,710	42.1	0.0
Iran	2,824	292	0	25	0	9	2,803	762	6,715	9,473	70.9	29.8
Iraq	900	530	0	3	0	4	528	72	2,037	4,382	46.5	20.5
Israel	1,382	111	1	32	1	1	186	213	1,927	2,361	81.6	58.5
Japan	3,220	68	17	79	11	0	189	159	3,743	3,943	94.9	81.7
Jordan	686	56	2	6	0	0	524	14	1,288	11,711	11.0	5.9
Korea (Rep. of)	2,411	27	8	22	6	2,951	174	74	5,673	5,797	97.9	41.6
Kuwait	167	19	0	0	0	0	5	0	191	582	32.8	28.7
Laos	20	0	0	14	10	4	0	154	202	249	81.1	8.0
Lebanon	658	45	0	41	0	0	237	626	1,607	2,650	60.6	24.8
Malaysia	283	370	2,623	183	1	128	8	0	3,596	7,081	50.8	4.0
Mongolia	0	0	0	0	0	0	0	0	0	2,351	0	0.0
Nepal	69	19	10	0	0	0	3	2	103	883	11.7	7.8
Oman	—	—	—	—	—	—	—	—	—	—	—	—
Pakistan	985	749	81	148	2	24	134	37	2,160	2,577	83.8	38.2
Philippines	2,277	41	49	71	—	22	31	6	2,497	2,683	93.1	84.9
Qatar	3	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	—	—
Saudi Arabia	389	25	0	3	0	0	108	18	543	1,216	44.7	32.0
Singapore	160	171	926	28	0	38	6	0	1,329	1,362	97.6	11.7
Sri Lanka	101	203	27	24	3	20	6	6	390	909	42.9	11.1
Syria	415	61	0	9	0	0	1,039	311	1,835	5,039	36.4	8.2
Thailand	1,367	147	166	24	415	169	136	75	2,499	2,848	87.7	48.0
Turkey	1,059	180	0	16	0	2	1,424	232	2,913	3,543	82.2	29.9
United Arab Emirates	—	—	—	—	—	—	—	—	—	—	—	—
Vietnam	430	11	78	110	6	33	37	1,715	2,420	2,796	86.6	8.0
Yemen	15	0	0	0	0	0	4	0	19	319	6.0	4.7
Yemen (Dem)	10	56	1	0	0	0	0	0	67	212	31.6	4.7
Other Asia	1,450	131	71	6	0	1	55	0	1,734	15,008	11.6	9.7
Sub-total	36,662	5,238	5,749	2,325	4,608	5,369	9,525	4,792	74,268	121,635	61.1	
Total sent from Asia (%)	(30.1)	(4.3)	(4.7)	(1.9)	(3.8)	(4.4)	(7.8)	(3.9)	(61.1)			

Source: UNESCO, Statistics of Students Abroad: 1962—68 (France: UNESCO, 1972)

Tabel I.B. Number of Asian Students in Major Receiving Countries, 1978

	USA	UK	Australia	Canada	Philippines	Japan	Germany (F.R.)	France	Sub-total (X1)	Total sent (X2)	X1/X2 (%)	USA/X2 (%)
Afghanistan	350	4	5	5	0	21	490	177	1,052	1,527	68.9	22.9
Bahrain	170	165	0	65	0	0	3	8	411	2,054	20.0	8.3
Bangladesh	860	312	94	128	0	39	55	24	1,512	1,818	83.2	47.3
Burma	37	39	16	6	0	18	10	2	128	176	72.7	21.0
China	15,488	171	42	411	334	3,586	57	659	20,748	21,039	98.6	73.6
Hong Kong	10,520	2,409	888	5,211	2,889	115	0	36	22,068	22,141	99.7	47.5
India	9,400	916	162	615	0	44	613	368	12,118	13,311	91.0	70.6
Indonesia	2,230	360	552	365	232	140	3,418	162	7,459	8,523	87.5	26.2
Iran	45,340	4,336	16	490	2,335	34	4,445	3,775	60,771	67,900	89.5	66.8
Iraq	1,250	1,698	3	60	0	3	246	490	3,750	7,236	51.8	17.3
Israel	2,570	256	16	173	0	7	414	400	3,836	5,601	68.5	45.9
Japan	10,490	367	153	183	111	0	1,201	1,081	13,586	14,399	94.4	72.9
Jordan	2,850	626	5	33	0	1	625	285	4,425	21,310	20.8	13.4
Korea (Rep. of)	4,980	3	49	57	91	n.a.	771	275	6,226	6,438	96.7	77.4
Kuwait	1,960	262	0	9	0	5	4	52	2,292	3,893	58.9	50.4
Laos	46	4	39	5	0	8	0	372	474	2,073	22.9	2.2
Lebanon	4,380	311	8	274	0	0	224	5,100	10,297	14,276	72.1	30.7
Malaysia	356	9,227	3,568	1,481	113	144	42	98	15,029	22,324	67.3	1.6
Mongolia	0	3	0	1	0	4	2	2	12	5,330	0.2	0.0
Nepal	160	44	8	5	0	11	19	7	254	1,452	17.5	11.0
Oman	86	40	0	0	0	0	1	11	138	428	32.2	20.1
Pakistan	2,420	745	53	236	0	15	258	73	3,800	4,458	85.2	54.3
Philippines	2,460	66	78	63	—	100	36	24	2,827	3,046	92.8	80.8
Qatar	330	19	0	9	0	0	1	5	364	750	48.5	44.0
Saudi Arabia	8,050	263	0	7	0	17	24	25	8,386	10,113	82.9	79.6
Singapore	830	1,597	430	374	0	56	50	77	3,414	3,619	94.3	22.9
Sri Lanka	480	1,448	158	92	0	27	87	54	2,346	2,772	84.6	17.3
Syria	510	160	0	9	0	2	532	1,355	2,568	6,726	38.2	7.6
Thailand	6,110	293	295	86	1,646	241	301	337	9,309	10,243	90.9	59.7
Turkey	2,020	1,115	4	88	0	6	5,464	1,309	10,003	11,889	84.2	17.0
United Arab Emirates	440	63	0	7	0	3	2	9	524	1,094	47.9	40.2
Vietnam	6,070	23	94	122	0	227	851	1,611	8,998	15,158	59.4	40.0
Yemen	74	31	0	2	0	0	4	81	192	2,663	7.2	2.8
Yemen (Dem)	0	9	0	0	0	0	9	97	115	1,303	8.8	0.0
Other Asia	3,963	1,642	71	81	798	8,410	1,410	1,801	18,176	114,099	15.9	3.5
Sub-total	147,280	29,027	6,807	10,753	8,549	13,284	21,670	20,242	257,612	371,711	69.3	
Total sent from Asia (%)	(39.6)	(7.8)	(1.8)	(2.9)	(2.3)	(3.6)	(5.8)	(5.4)	(69.3)			

Source: UNESCO, Statistical Yearbook: 1983

BEST COPY AVAILABLE

(6) The opportunities provided in American higher education to cover educational costs through part-time work.

We will seek here first to demonstrate how the strengthening of these linkages over the post-war period has directed increasing numbers of Asian students to the United States. Then we will consider how national differences in terms of these linkages are related to national differences in the preference for American higher education over other alternatives.

Post-war Trends in Asian-American Linkages

Political Affinity

Perhaps the most obvious reason for the emergence of America as a major destination of Asian students is the increased political visibility of the United States. Prior to World War II, the United States tended to take an isolationist stance in international relations, especially vis a vis Asia. But with World War II, the United States was actively drawn into Asia. With the conclusion of the war, a largely American occupation governed Japan for several years. And as the United States sought to contain communism, American troops became heavily committed in Korea, Taiwan, the Philippines, and later Vietnam. Large numbers of Americans interacted with Asians, and increased Asian awareness of the United States.

Parallel to America's political advance into Asia was its promotion of opportunities for educational and cultural exchange. The earliest expression was the Fulbright program. Supplementing the Fulbright program were the students supported under the technical and military aid programs of the United States Government and the private foundations that were discussed in Chapter Three.

Up to 1968, American support for these programs steadily increased, serving to familiarize numerous Asians with American higher education. Japan, Korea, Taiwan, India, Indonesia, Vietnam, Thailand, Iran and the Philippines are all countries that became the focus of U.S. political initiative. And in each country, following the American initiative there was a sharp acceleration in the number of students going to the United States. For example, during the fifties the annual volume of students to the United States from each of the first four countries mentioned above increased from the 100's to over 5000. Similarly, the volume from Vietnam and Thailand doubled during the late sixties. Thus the U.S. Government supported programs served to "prime the pump" in selected Asian countries that up to that time

had little contact with American higher education. Even after the level of the U.S. Government support for educational exchange in these countries declined, students continued to come, using their own funds or the funds of friends and relatives who were now in the United States.

American policy also has resulted in some down turns in exchange. For example, through the sixties India was America's favorite in South Asia. But as India became more vocal in its opposition to America's Vietnam policy, the US cooled to India. Concurrently, assistance to Pakistan was increased. From the early seventies, the volume of students from India began to decline while that from Pakistan steadily increased.

Economic Ties

The increased American political role in Asia was accompanied by increased economic activity, sometime in direct support of the political initiatives. For example, American exports to Taiwan, Korea and Japan sharply increased during the period of the Korean war and have continued to be substantial. America came to replace France as the major source for Vietnamese imports in the mid-sixties and continued in that dominant position until the end of the Vietnam war. In the case of Hong Kong, Malaysia, and Pakistan, the dollar value of American imports became larger than those from the United Kingdom, and at least through 1978 exceeded Japan's share.

The degree of interdependence of national economies on international transactions was shown in Chapter Six to be related to the overseas student sending rate. Presumably, the presence of foreign businesses and products tends to highlight the value of overseas study as an asset in obtaining a high income job in local or international offices of a foreign firm. It would seem to follow then that the particular country which students choose for their overseas study would be influenced by the relative dominance of that country in the local economy.

Alternately, it can be argued that countries that send large numbers of overseas students to a particular host country will, because of the familiarity those students acquire of the host country's products during the sojourn, seek to import products from that country. Similarly, by virtue of the knowledge obtained of the tastes of the host country and the contacts developed while studying there, the overseas students on their return will be in an improved position to export to the host country. (Blaug, 1981). Broadly speaking, both of the above arguments suggest the likelihood of a relation between economic ties and the flow of students. While there is room

for more careful work, cross-tabular analysis that we have carried out indicates that nations who rapidly increased the number of students sent to the United States between 1963 and 1978 also significantly increased their American exports. Similarly a weak relation was obtained between the increasing volume of students to the U.S. and increasing imports from the U.S. Clearly improved economic linkages also can promote exchange.

Immigrant Ties

The United States is physically closer than Europe to much of Asia, and while during the first century of American development there was little interaction with Asia, this situation changed by the mid-19th century. Clipper ships and later steam ships with increasing frequency plied the Pacific route, and Asian ideas and products became more familiar to the American public. Whereas the first wave of American immigrants were from Europe, by the late nineteenth century Asians were in increasing numbers coming to the United States, first from China and later from Japan and selected other countries. By 1950 the cumulative total of Chinese immigrants was 400,000 and 380,000 had come from Japan. Over the post-war period, Asian immigrants have come to outnumber those from Europe and from Latin America (if Mexico is excluded). Also the pattern of Asian immigration has diversified. While the numbers from China and Hong Kong continue to be large, immigrants from the Philippines, Vietnam, Korea, India and Thailand have become progressively more numerous.

The inflow of Asian immigrants can be viewed both as a cause and a consequence of the preference of Asian students for higher education. In the early post-war period the vast majority of Asian students from countries such as Taiwan, Hong Kong, India and Korea came to the United States with the explicit purpose of seeking post-study employment in the United States, if not immigrating (Oh Taik, 1977). Until the recent changes in immigration laws, it was relatively easy for these students to realize their plans. Thus it is not surprising that countries such as India, Korea, and Hong Kong that have since World War II sent increasing numbers of students to the United States are among those whose immigrant numbers have also sharply increased. Once an immigrant community becomes established in the United States, its members can serve as guarantors for other countrymen who wish to study in the U.S., thus perpetuating the flow.

The American concern for selected groups of Asian refugees is another factor

in both immigration and student flows. For example in 1964, 79 per cent of Vietnamese students went to France and only 12 per cent to the U.S.A. With increasing American involvement in Vietnam, by 1970 the number of Vietnamese coming to the U.S. for study equalled those going to France. Following the American withdrawal, large numbers of Vietnamese refugees fled to the United States, and many took up study. Thus by 1976, the United States was the primary location of "overseas" study for Vietnamese; 60 per cent went to the United States compared with 22 per cent for France. In fact, many of those "overseas" in the United States were refugees who would have no opportunity to return to Vietnam. A somewhat similar situation has occurred with respect to Iran since the Khomeini Islamic revolution.

Similarities in Structure and Language

Because of the comparatively limited influence of the United States in Asia in general and in Asian educational institutions in particular during the colonial era, it is often assumed that the tertiary educational systems in Asia and in the United States do not match. However, a closer look reveals significant similarities among tertiary educational institutions in the two areas.

First, as a result of both externally and indigenously induced reforms over the post-war period, the tertiary educational systems of Korea, Japan, China (and Taiwan), the Philippines, Thailand, and Indonesia have acquired many of the structural characteristics of the American system. The American reforms have received support from the increasing numbers of American educated scholars who now make up the staff of these systems; this proportion ranges from about 5 per cent in the large Japanese and Indonesian systems to well over 20 per cent in Taiwan and Thailand. Recent developments in the other countries of the region also indicate that American influence is making inroads into Asian tertiary educational systems which were once dominated by Europeans. For example, the curriculum structure of the Chinese University of Hong Kong is American. Another example is Malaysia which has recently abandoned English examinations and is developing a new curriculum which has American features.

Moreover, after the war, the establishment of local offices for mediating educational institutions such as the Institute of International Education and TOEFL in many parts of Asia has helped to promote a better understanding of the American educational system in the region.

But the most important factor that brings the American system closer to Asia

in comparison with other European systems might well be the popularization of English as an international language in the region. Not only is English the first foreign language taught at least at the secondary level to almost all students in the major sending countries of Asia, it also has official status in India, the Philippines, Singapore, and Hong Kong. English, moreover, has semi-official status in Burma, Malaysia, Pakistan, and Sri Lanka (Conrad and Fishman, 1977). For this reason, it is not surprising that the U.S.A., the UK, Canada, Australia, New Zealand, India and the Philippines where English is the language of instruction at the tertiary level attract the great majority of all Asian overseas students.

Size of the Higher Education System

The above four factors are important in the sense that they are "threshold factors." Without such socio-economic and linguistic connections, a country can hardly become competitive in attracting foreign students. With regard to Asia, the relative lack of such connections by the USSR accounts for the small number of Asian students it can attract.

However, in the market for Asian overseas students, the European and Commonwealth competitors of the United States still have relatively strong linguistic and socio-economic connections with Asia. Thus to account for the predominance of the U.S. in the Asian student market, other factors also need to be considered. The great

Table 2. Comparative Size of the Tertiary Sector among Major Receiving Countries

Country	Enrollment (1978)	% U.S. Enrollment (1978)	Enrollment (1963)	% U.S. Enrollment (1963)
USA	11,260,092	100.0	4,494,626	100.0
USSR	5,109,800	45.4	3,260,700	72.5
India	4,456,198	40.0	1,100,995	24.5
Japan	2,432,052	21.6	918,704	20.4
Philippines	1,129,056	10.0	404,000	9.0
Germany (F.R.)	1,111,713	9.9	342,760	7.6
Italy	1,090,537	9.7	242,207	5.4
France	1,020,503	9.0	386,566	8.6
Canada	831,263	7.4	199,174	4.4
U.K.	788,186	7.0	211,023	4.7
Egypt	486,067	4.3	145,651	3.2
Australia	309,783	2.8	116,550	2.6

Source: UNESCO, Statistical Yearbook, 1981, 1965.

Table 3. Percentage of Foreign Students<i> in Third Level Enrollment<ii> in Target Host Countries

Country	1950	1955	1960	1963	1970	1975	1978
U.S.A. <iii>	1.3 —	1.4 —	1.5 —	1.7 —	1.7 2.3	1.6 2.5	2.3 3.6
U.K. <iv>	— 8.1	— 11.6	— 9.6	— 10.8	2.3 9.5	2.5 14.2	3.6 14.9
Australia	1.1	3.4	5.6	5.6	4.3	3.0	2.8
Canada <v>	4.7	5.9	6.4	6.0	7.4	5.9	3.2
India	n.a.	0.4	0.3	0.3	0.3	n.a.	0.2
Philippines	n.a.	n.a.	1.5	1.6	0.4	n.a.	1.0
France <vi>	10.0	10.6	13.3	10.0	n.a.	9.0	10.6
Germany(F.R.)	1.9	5.3	7.4	7.2	5.6	5.7	5.0
Italy	0.7	1.5	1.3	1.4	2.1	1.9	2.4
Japan	0.7	0.5	0.6	0.6	0.6	0.6	0.6
U.S.S.R.	n.a.	n.a.	n.a.	n.a.	0.4	n.a.	1.0

Notes:

<i> The percentage is based on foreign students in all third level institutions unless stated otherwise.

<ii> The percentage is based on enrollments in all third level institutions unless stated otherwise.

<iii> Figures in the first row are based on enrollment in all third level institutions; figures in second row are based on enrollment in universities and equivalent institutions.

<iv> Figures in the first row are based on enrollment statistics that include technical colleges & colleges of education; figures in the second row are based on enrollment in universities & equivalent institutions.

<v> The 1975 & 78 enrollment statistics include part-time students.

<vi> The number of foreign students includes those enrolled in universities and equivalent institutions only.

Source: UNESCO, *Statistical Yearbook*, various issues

capacity of the American system for absorbing students is possibly the most important. As shown in Table 2, the American higher educational system dwarfs the systems of all the other countries represented.

The Soviet Union which has the world's second largest system has less than one-half the places of the American system, India has only four-tenths the number of places, Japan one-fifth, and the Philippines one-tenth; all the European systems have less than one-tenth the capacity of the American system. If foreign students made

up an equal proportion of the students of all of these systems, the United States would have twice as many students as any other country. In fact, foreign student proportions for these countries vary from less than one per cent to an apparent ceiling level of ten per cent. In 1950, most of the European countries were near ten per cent level whereas the U.S. had only two per cent.

Over the post war period, the education systems of all the major host countries have expanded at an average annual rate ranging from four to seven per cent. In the European cases where one in ten students was foreign, the rate of expansion set an outside limit on their capacity to absorb foreign students. In contrast, in the American case where foreign students were initially such a small proportion of total enrollments, an increased volume of foreign students could be absorbed both through increases in the system and in the proportion foreign students made up of all students. As shown in Table 3, between 1963 and 1978 foreign students increased from 2.0 to 2.3 per cent of all students in the expanding American system: 0.3 per cent of the American system in 1978 equalled about 40,000 students or more foreign students than were in any of the other countries. Thus, we can see that the sheer size of the American system is an important factor in explaining its relative capacity to absorb the Asian demand.

Quality of the American System

Internationally, the most prestigious American universities are regarded as equal to any in the world, and some would argue that the Asian students are attracted to the United States to attend these institutions. While we do not have data specifically on Asian students, there does appear to be some validity to this observation for earlier periods. For example, in 1963, among the ten American universities and colleges with the largest foreign student enrollments, eight were included in the list of the ten most prestigious universities at that time (Table 4). Foreign students as a total per cent of enrollments varied from 3.6 per cent at Michigan to 12.3 per cent at MIT.

If quality were the major pulling force, we would expect the foreign student enrollments at these institutions to steadily increase. But in fact, total enrollments at the top American institutions have not expanded radically over the fifteen years since 1963, nor in most cases did these institutions significantly increase their foreign student proportion; in fact, in three cases, they actually decreased the ratio. Looking at the 1978 list of American institutions receiving the largest number of foreign students, only five are among the nation's most prestigious institutions. In contrast, three of the institutions receiving large numbers of foreign students are not notably

Table 4. Top Ten Institutions in Terms of the Number of Foreign Students Enrolled

Year	Institution	No. of foreign student	% of total enrollment
1964/65	New York University	2986	7.1
	U. of California, Berkeley	2588	5.3
	Columbia University	2353	9.3
	U. of Wisconsin, Madison	1290	3.4
	Howard University	1258	16.4
	U. of Pennsylvania	1233	6.6
	U. of Michigan, Ann Arbor	1181	4.1
	U. of Minnesota, Twin Cities	1149	3.6
	U. of Illinois, Urbana	1137	3.1
	Harvard University	1054	7.3
1978/79	U. of Southern California	3522	12.8
	Miami-Dade Community College	3260	8.2
	U. of Wisconsin, Madison	2404	6.1
	U. of Michigan, Ann Arbor	2260	6.2
	U. of Houston, Central Campus	1989	6.7
	U. of Maryland, College Park	1933	5.2
	Howard University	1887	18.3
	U. of Texas, Austin	1853	4.3
	U. of Washington	1817	5.0
	Harvard University	1815	12.0

Source: Institute of International Education, Open Doors 1979/80

high in prestige and have had some difficulty in keeping up their American student enrollments so they have turned to foreign students. They are said to be in the "business" of recruiting foreign students. Thus it would seem that factors other than quality have to be looked to in explaining the attractiveness of American higher education to the vast majority of foreign students; only a minority actually attend the prestige schools.

We expect that the relative quality of American higher education attracts one group of Asian students. However, others are drawn for different reasons. One large

group is drawn to the American system because they expect it will allow them to complete their degree studies in a reasonable period of time. Others are attracted to the amenities of particular schools, their location, their ambience. As Eric Ashby (1971) once observed, the American system by virtue of its large size can be a place of "Any Person, Any Study." This capacity of the American system to serve such a wide range of tastes also accounts for its attractiveness to Asian students.

Cost

Yet another explanation frequently proposed for the attractiveness of the American system is its low cost. But there is little basis for this assertion. The cost of living in the United States is equal to what students encounter near most European universities, and the tuition levels, even in American state universities, are and always have been higher than what a foreign student pays in, for example, the UK, Canada, Australia, France, or West Germany. The one cost advantage in the U.S. is the relative ease of picking up part-time work to supplement one's income, which many foreign students do make avail of.

Foreign students contemplating study in the United States usually are not aware that they will have to work their way through school. Many have a high regard for their academic proficiency and assume they will earn scholarships after spending some time on campus: These students experience a let-down when they find how few scholarships are actually available; some feel resentment that they were falsely attracted to the United States by the empty prospect of scholarships. Yet once the reality is accepted, most foreign students adjust to the routine of work and study. Thus the availability of opportunities to generate extra-income rather than low cost turns out to be the strong cost feature of the American system.

Contemporary Analysis of the American Preference

The changing context of the Asian-American relation has resulted in increasing numbers of Asian students going to the United States for higher education. But what accounts for the considerable national differences in preference for the United States that were illustrated in Table 1?

As already suggesting in our historical sketch, some Asian nations have been more profoundly affected by this changing context than others. We expect that the extent to which an Asian nation has become linked to the United States in the several

respects discussed above affects the degree of preference of its students for American higher education. This proposition can be examined using a cross-sectional analysis. We will focus on 1978 as that is the year for which the most recent data of high quality is available. Below are the variables to be considered in the analysis.

Preference for American Higher Education, the Dependent Variable

In Table 1 we presented the percentage of overseas students from each Asian country that selected the United States for their study. This percentage is what we will refer to as degree of American Preference. In 1978, two socialist countries had no overseas students in the United States. In contrast, 80.8 per cent of overseas student from the Philippines, a former American colony, were in the United States.

Independent Variables

Level of American Assistance. American political involvement companied by extensive funds for technical and military assistance was shown in Chapter Three to "prime the pump" of the outward flow of students in the direction of the United States. Soon after a country became the target of American assistance, the volume of its student flow to the United States significantly accelerated, and in virtually all cases the momentum was sustained even after American assistance was cut back. To summarize the yes or no nature of level of assistance, a dummy variable is created with a value of 3 to those countries who have been recipients of extensive military and technical assistance, a value of 2 to those who have received only one or the other forms of assistance, and a value of 1 to those countries that have not received substantial amounts (as indicated in Chapter Three) of American assistance.

Imports from America. Extensive American products in local economies reflect a significant presence of American companies in national economies and a favorable impression of American technology. Local youth seeking employment in multinational firms recognize that their employability will be improved by studying in American colleges whose degrees are positively evaluated by American corporations. The percentage in dollar value American imports make up of all foreign imports is the standard indicator of this concept.

Exports to America. A second indicator of the visibility of the American economy is the proportion exports to the United States make up of all of a nation's exports. Some knowledge of the American market is necessary in order to succeed in its penetration. Study in the United States is one way of acquiring the necessary knowledge.

Immigration to the United States. To the extent large numbers of the nationals from a country immigrate to the United States, information will be transmitted about the possibilities of study there. In addition, recent immigrants have primordial ties to relatives of the home country and can be persuaded to share in the support of their overseas study. As indicated above, large numbers of persons have immigrated overseas in recent years with the United States being only one among several destinations. A measure of the proportion in America of total outmigration would seem to have the most bearing on preference for American higher education. But data for the total outmigration from each of the 34 countries is not readily available. As an alternative, we will simply use the total number migrating to America between 1970—74 over the total national population in 1978. The earlier period for the outmigration data is to allow migrants a period of adjustment before expecting them to assist their countrymen in overseas study. This indicator reflects the relative likelihood that a prospective overseas student will be able to find countrymen in the U.S. who can offer information and other assistance relating to the application process.

System Compatibility. In the previous section the compatibility of Asian systems with the American system was also suggested as a factor augmenting an American direction in student flow. As it turns out those countries which received the most American assistance are the same countries that have compatible systems. Thus a distinct indicator is not required.

Scale. The exceptionally large scale and hence absorptive capacity of the American system was also noted as a factor attracting Asian students to American higher education. For an Asian student seeking a place for overseas studies, first thoughts might focus on one of the traditional European destinations. But as the student came to appreciate the limited absorptive capacity of these destinations relative to the numbers of his countrymen going overseas, he might expand the search to new destinations with more absorptive capacity, i.e. the United States. The implication is that America becomes more attractive to the extent a country sends a large number of students overseas.

Ability to Pay. Finally we pointed out that the American system is relatively costly compared to other alternatives. To the extent the average income of a country is high, a larger number of its young people are likely to have the ability to afford an American higher education. Conversely, most prospective students of low income countries have to rule out the expensive American system as a feasible overseas option.

Evaluating the Cross-Sectional Model

Table 5. Statistics for Six Variables Regressed on Preference for American Higher Education

Variable	r	Beta	B	F-value
58 U.S. Assistance	.486	.182	58.45	2.086
52 Exports to U.S.	.344	.05	.106	.222
56 Imports from U.S.	.771	.449	1.831	13.578
1 GNP 78	.238	.265	.015	6.159
5 Number Overseas 78	.299	.066	.014	.341
51 Immigrants 70-74	.629	.362	.029	8.425
Constant		−72.307		

Multiple R = .873
R-Squared = .762
R-Value = 14.382
P < .0001

Each of the above indicators was found to have a positive correlation with Preference for American higher education (Table 5). Imports from the U.S., Immigrants to the U.S., and U.S. Assistance had especially strong correlations, while the remaining correlations were modest.

When the six indicators were included in a single linear regression, they explained an impressive 76 per cent of the variance in Preference for American Higher Education. Four of the selected indicators made a significant contribution in the expected direction to accounting for the variation in Preference. Exports to the U.S. and Scale, which both had modest simple correlations with Preference and, moreover, strong associations with other of the indicators, added little to the equation. We can infer from this equation that:

(1) Preference for American Higher Education by the overseas students of an Asian nation is influenced by the extent of economic and military assistance that nation has received from the United States.

(2) Preference for American Higher Education by the overseas students of an Asian nation is influenced by the extent to which American imports prevail in that nation.

(3) Preference for American Higher Education by the overseas students of an Asian nation is influenced by the number of immigrants that nation has sent to the United States.

(4) Preference for American Higher Education by the overseas students of an Asian nation is influenced by the average standard of living in that country.

Sending Level to the United States

Over the last two chapters, we have developed explanations for (1) the overseas Sending Level of Asian States, and (2) for their degree of Preference for the United States as a place of study. As a way of bringing these two lines of analysis together, we will introduce a final model to account for the actual Sending Level to the United States, computed by dividing the numbers of students in the United States in 1978 from a country by that country's population.

A complex model could be proposed drawing on all of the variables included in both of the above analyses. While such a model has analytical appeal, it would prove impossible to implement statistically, given the small number of countries for which we have data.

Instead, we will introduce a simpler model, using the dependent variables from the above two equations as key predictors of Sending Level to the United States. The first, Sending Level, is an expression of the internal forces in nations which lead students to go overseas. The second, Degree of Preference, is an expression of the forces which attract the outward flow in the direction of the American destination. To complete the model, we add *Immigration Rate to the United States,* the quotient from dividing total immigrants to the United States from a country over the 1970—74 period by that country's population, which is a secondary indication of that country's ties with the United States.

As illustrated in Table 6, all of these variables are positively correlated with Sending Level to the United States. When the three variables are combined in a regression equation to explain Sending Level to the United States, they account for an impressive 60 per cent of the variance.[1]

Table 6. Statistics for Three Variables Regressed on Sending Rate to the United States

Variable	r	Beta	B	F-value
14 Global Sending Level	.641	.662	.021	33.008
54 Preference UH Ed	.285	.197	.0004	1.766
61 US-Oriented Insti.	.465	.314	.006	4.582
Constant		−1.869		

Multiple R = .792
R-Squared = .627
R-Value = 16.786
P < .0001

From the above it can be concluded that:

(1) The overall sending level of an Asian country strongly influences its sending level to the United States.

(2) The greater the proportion of students from a country that select the United States, the higher the sending level from that country to the United State.

(3) The stronger the primordial ties of a country with the United States, the higher the sending level from that country to the United States.

The Future

We have identified the key positive elements in the context of the Asian-American linkage that lead Asians to select the United States as a place of study. Also, we have identified cost as one respect in which American higher education is not competitive.

American higher education has come to assume that large numbers of foreign students will continue to frequent its campuses. Through 1983, the number of foreign students continued to increase, but from 1982 there was an important shift in the composition. For the first time in over a decade, the total numbers from most sub-regions evidenced a decline. Only for the Asian region, did the total number increase. Will this trend continue, or are the numbers for the Asian region also approaching their peak?

Looking to the future, it is useful to consider the ways in which the elements we have identified may change. Concerning the political and economic contexts, the United States is certain to maintain an important presence in Asia. However, already by the late seventies it was experiencing vigorous competition from Japan. In several of the Asian markets, Japanese exports were displacing American products. And Japan has become increasingly visible in Asian political dialogue.

To further enhance its image in Asia, Japan is promoting educational exchange and several Asian nations have responded in a positive way. Singapore has inaugurated an official "Learn from Japan" policy and Malaysia has launched a "Look East" policy. Also, Thailand and mainland China have signed important bilateral educational exchange agreements with Japan. While Japan traditionally has hosted only about 10,000 foreign students a year, from 1984 the Ministry of Education announced a new policy to substantially increase the intake. Both through increasing government scholarships and the conditions that foreign students encounter on Japanese campuses, the Ministry plans to increase the number of foreign students to 100,000 by 1995.

Japanese universities are usually considered difficult for foreign students as, among other reasons, they conduct their courses in Japanese. But students who have a basic command of Chinese, and there are large numbers of such students in Asia, find it relatively easy to achieve adequate mastery of Japanese. Japanese language instruction has become more readily available in many Asian countries, both at special language schools and as a second foreign language in the formal school system. As part of its new policy to attract foreign students, the Japanese government plans to enable some of its universities to teach courses to be taught in English. The united States can expect competition from other sources. Traditionally the US universities have been viewed as more similar or compatible with the educational systems of several of the Asian nations that send large numbers of students. Following the recent downturn in the number of overseas students in the United Kingdom, the universities there have become much more aggressive in recruiting students.

Asian students in the past tended to move outside of the region for overseas study. But increasing numbers have discovered that the universities of nearby countries provide relevant education at a substantially lower cost. Increasing numbers are heading to universities in the Philippines (11,763 in 1978) and India (7,726 as of 1978) where the language of instruction is English. These movements are often reinforced by longstanding cultural ties; for example, there are substantial Indian minorities in one-third of the Asian countries included in this study. Some Malaysians are seeking entrance to Indonesian universities where the language of instruction, bahasa Indonesia is virtually identical with bahasa Malaysia. All of these Asian systems are large and have much capacity to absorb foreign students. Foreign students make up less than one per cent of all students in Japan, the Philippines, India and Indonesia. In addition, there is much movement in the Middle East between countries where most of the universities conduct class in Arabic.

Thus we can see that Asian students are discovering a number of alternatives to the American system. We can anticipate a significant diversification of Asian preferences in the years to come. The overall volume of demand for overseas study will determine whether the numbers coming to the United States will continue to increase or not.

Conclusion

Figure 1 provides a pictorial illustration of the relations that have been identified over the last two chapters. In presenting this "path diagram", we do not mean

Figure 1. Factors Influencing the Flow of Asian Students to the United States

to suggest that it is the best statistical explanation possible. Indeed, in the course of analysis we have found identified other variables that would inflate our equations. However, we have been concerned to develop models that are as simple as possible and that portray the relations we believe to be behind the attraction of Asian students for the United States.

Table A. Values for the Variables Included in Tables 7.5 and 7.6

Country	58	52	56	1	51	14	54	61
Afghanistan	1	35	89	170	40	9	229	26
Bahrain	1	37	68	5270	11	512	83	1
Bangladesh	1	152	193	90	30	2	473	48
Burma	1	4	40	160	308	0	210	7
China	3	350	200	2000	8120	140	736	842
Hong Kong	1	303	119	1500	2045	492	475	1076
India	2	120	106	190	6728	2	706	1017
Indonesia	2	254	125	370	291	5	262	77
Iran	3	125	208	1600	1290	181	668	962
Iraq	1	5	101	2410	884	55	173	38
Israel	3	175	192	4150	1372	143	459	207
Japan	1	258	187	8810	2680	12	729	474
Jordan	3	22	73	1180	1351	665	134	98
Korea, Rep.	3	278	203	1480	9345	16	774	361
Kuwait	1	7	131	17100	58	299	504	60
Lao	1	1	48	86	17	55	22	11
Lebanon	2	33	81	1142	1030	446	307	149
Malaysia	2	186	139	1370	131	166	16	109
Mongolia	1	1	3	780	0	313	1	1
Nepal	1	104	140	130	17	3	110	8
Oman	1	157	63	2970	2	161	201	1
Pakistan	2	66	150	260	1123	5	543	330
Philippines	2	338	213	600	15271	6	808	249
Qatar	1	86	100	16670	2	375	440	6
Saudi Arabia	2	158	212	7280	25	120	796	107
Singapore	1	160	127	3830	64	150	229	31
Sri Lanka	2	75	85	230	132	18	173	22
Syria A.R.	1	6	41	1030	175	74	76	42
Thailand	3	110	136	590	1874	21	597	579
Turkey	1	114	100	1330	663	26	170	140
U.A. Emirates	1	100	145	15590	1	136	402	1
Vietnam	3	327	5	300	1466	28	400	164
Yemen	1	130	11	420	349	45	28	3
Yemen-Dem.	1	509	5	480	48	65	1	2

Key to Variables:

58 Technical Assistance (1 = negligible, 2 = materate, 3 = substantial)
52 Export to U.S. as % All Exports
56 Imports from U.S. as % All Imports
1 GNP per capita 1978
51 Total Immigrants to U.S. 1970-74
14 Overseas Sending Rate
54 Students to U.S. as % of All Students
61 Overseas to U.S. in 1973

Footnote

1) Models which did not use the intervening variable, preference for American Higher Education, but rather several of its predictors explained an even higher proportion of the variance. For example, a model combining Sending Rate, Imports from the U.S., U.S. Assistance, and a new variable Immigration Rate to the U.S. (the quotient of Total Immigrantion from 1970—74 divided by Population Size) accounted for 75 per cent of the variance. We prefer the model presented in Table 6 both because of its simplicity and its use of variables reflecting modes of linkage between Asian and the United States.

BIBLIOGRAPHY

Altbach, Philip G.
Higher Education in the Third World: Themes and Variations (Singapore: Maruzen Asia, 1982)

Blaug, Mark
"The Economic Costs and Benefits of Overseas Students," in Peter Williams, *The Overseas Student Question* (London: Heineman, 1981): 47-90.

Board of Foreign Scholarships, *Annual Report*, 1982

Brickman, W.W.
Two Millenia of International Relations in Higher Education (Norwood, Pennsylvania: Norwood Editions, 1975).

Cummings, William K.
"Going Overseas for Higher Education: The Asian Experience," *Comparative Education Review 28* (May, 1984): 241-257.

Fawcett, James T., Fred Arnold, and Urmil Minocha
"Asian Immigration to the United States: Flows and Processes, paper at Conference on Asia-Pacific Immigration to the United States," East-West Center, Honolulu, Sept. 20-25, 1984.

Fishman, Joshua A., R.L. Cooper and A.W. Conrad,
The Spread of English: the Sociology of English as an Additional Language (Rowley, Mass.: Newbury, 1977).

Glaser, William
The Brain Drain: Emigration and Return (Oxford: Pergamon Press, 1978).

Johnson, Walter and Francis J. Colligan
The Fulbright Program: A History with a foreword by J.W. Fulbright (Chicago: University of Chicago Press, 1965)

Smith, Alan et al,
"Foreign Student Flows and Policies in International Perspective," in Peter Williams, *The Overseas Student Question* (London: Heineman, 1981): 165-222.

Oh Taik.
The Asian Brain Drain: A Factual and Causal Analysis. (n.p.: Robert S. Reed and Adam S. Eterovich, 1977).

Williams, Peter,
The Overseas Student Question: Studies for a Policy (London: Heineman, 1981).

« COMMENTS ON PROF. CUMMINGS' PAPER »

Joe Hicks*

I would like to limit myself to a few simple comments on Prof. Cummings most interesting paper. Since my own presentation is largely based on Prof. Cummings' framework I will save many of my comments until my own presentation.

In reading Prof. Cummings' paper one can't help but notice that he has brought some order to a most unorderly bit of speculation i.e., the problem of the mass influx of foreign students to the U.S. He has neatly packaged the most significant contextual reasons for student flow into seven types and these form a useful structure for understanding the foreign student problem.

Before commenting on these seven types, however, I would like to suggest that the "Watch out America" stance, while perhaps a noble thought, may not be convincing enough to the people who will be dealing with foreign students. I don't think that there is in effect any real competition for foreign students or will be for that matter on the national level. America, for example, would most likely be happy to give Canada some of her foreign students and vice versa. The prospects of large numbers of foreign students is not really too pleasing to the officials in the Japanese Ministry of education either.

There are plenty of foreign students to go around. As Japanese and American universities feel the pinch of decreasing enrollment they will most likely follow the law of entropy and take a course of action which is less difficult and troublesome than encouraging large numbers of foreign students. These measures could take the form of increased evening classes for adults or variety or amusement courses on say folk dance. There are many reasons for a lack of enthusiasm for foreign students; they place a great deal of stress on a university ecology. Of course I fully and firmly believe that foreign students are vital to peace and international cooperation but they are hard work for everyone concerned and to those on the front lines not such a desirable quantity at the moment.

I would like to consider a couple of problems with the seven point framework for explaining the foreign student student increase. I think there are problems with using an economic index and care should be taken to avoid mixing political factors

* Research Associate, R.I.H.E.

in. The small numbers of Afghan and Burmese students seem less due to the economic factors mentioned and much more to political factors. Politics and economics are to some extent inseparable but at least more mention could have been made about political factors in this case.

There is also a problem with the hasty treatment of item number six, the quality context. I think this should have been more carefully considered, principally because using the measure of only the TOP Ten Universities can hardly support or refute a quality argument. There are a number of universities outside of the top ten that offer excellent education for foreign students and these schools and the degrees and skills they offer are major pulling forces. Also, including institutions such as Dade Community College may also cause imbalance in the comparisons due to differences in the type of foreign students there.

A point that may have been inferred but that I missed is that there is often an American university 'mafia' or a German university 'mafia' in the home government or university, and attending an American university may increase job chances through this mafia; indeed a powerful motivation for going abroad.

My question to you is, what you think the future 'big foreign student countries' will be and what you base your predictions on. I greatly profited by and enjoyed your presentation. Thank you.

THE SITUATION OF ASIAN STUDENTS IN JAPAN
— Can Japanese Universities Handle A Ten Fold Increase? —

Joe Hicks*

The Problem

In looking at the present imbalance in the foreign student population for the world's industrialized nations it is obvious that Japan is quite far behind the others. Furthermore, there is a definite problem in the distribution of Asian foreign students in Japan with only two national groups of students (Chinese and Korean) taking up 70—80 percent of the total number. The Japanese government and a few Japanese universities have recently begun to take steps to increase the numbers and are slowly beginning to work on increasing facilities. Questions arise, however, as to whether Japan can handle a large increase i.e., whether Japanese universities are ready and able to educate this wave of foreign students should it appear. From an economic political and cultural standpoint larger numbers of foreign students, particularly Asian foreign students would surely be an asset to Japan, a country greatly concerned about developing better ties with its resource-wealthy neighbors. These benefits in the form of better economic political and cultural ties will be hindered if foreign students cannot get the education and skills both they and their countries need. A great deal more work and planning is necessary to avert a possible negative counter-effect from having large numbers of disillusioned returning Asian students. The present situation gives no guarantee that this won't happen.

It is the sincere hope of the present author that Japanese universities will realize and actualize their potential excellence as equal Asian partners and do their share as equal partners to cooperate in helping to educate a growing and demanding young Asian population.

In this paper the following broad issues will be brought up for discussion.

1) The projected increase and demographic information about Asian foreign students in Japan.
2) Why are there so few foreign students in Japan? per Cummings (1984) context model.
3) How do Asian students evaluate Japanese higher education?

---

* Research Associate, R.I.H.E.

4) Conclusions and points for discussion.

1) The Projected Increase and Basic Demographic Information

In a recent (1984) committee report to Monbusho entitled Foreign Student Policy for the 21st Century it was projected that the number of foreign students will increase to 100,000, about ten times the present level. However, it should be noted that this increase only provides for 10,000 government scholarship students, the rest to be private or funded by their own governments (see Table 1 for a breakdown of the projected vs. actual number of foreign students).

Table 1. Present and Projected Number of Foreign Students

Division / Year		University Level (including Jr. College)									Technical Schools/ Business Schools (Mostly Private)	Total		
		Undergraduate Level			Graduate Level			Sub-total						
		National	Other Public/ Private	Total	National	Other Public/ Private	Total	National	Other Public/ Private	Total		National	Other Public/ Private	Total
Early Period	1983	1,586	4,095	5,681	2,943	962	3,905	4,529	5,057	9,586	842	4,529	5,899	10,482
	1992	5,800	17,300	23,100	9,600	3,700	13,300	15,400	21,000	36,400	3,600	15,400	24,600	40,000
Final Period	2000	15,000	45,000	60,000	20,000	10,000	30,000	35,000	55,000	90,000	10,000	35,000	65,000	100,000

Source: Monbusho, 21 Seiki e no Ryugakusei Seisaku (1984)

More than likely the 10,000 scholarship students will come (more than a few of them looking for a stepping stone to the U.S. or Europe). It will be of interest, however, to see how many of the other 90,000 materialize. For various reasons which will be discussed in the next section this prediction may not come true unless there are some vary dramatic changes in the next 15 years.

Before too much more ungrounded speculation is made here a brief examination of the characteristics of the present Asian foreign student population is in order. The first thing that stands out is the very small number of foreign students in Japan compared with that of major industrialized nations.

This applies both to numbers and also to the percent of the whole student population (Table 2). The foreign student population of Japan is strongly Asian with Asian students making up about 60 percent of the Monbusho scholarship students and 80 percent of the private and home-government sponsored students (Figure 1). This trend has been noticeable ever since Japan started hosting foreign students. A most remarkable feature of the Asian population is the country imbalance with 50 per cent or more of the total foreign student population taken up by Chinese (P.R.C. plus Taiwan) students (Figure 2). The only other country having more than a thousand

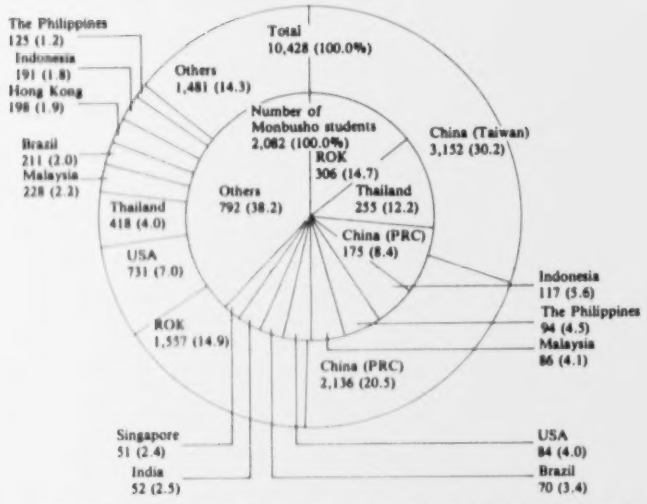


Figure 1. Foreign Students in Japan According to Country and Origin of Educational Funding Monbusho (1983)

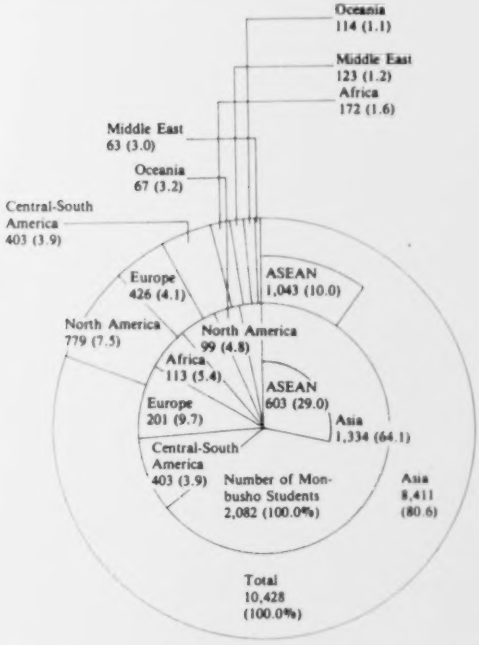


Figure 2. Number of Foreign Students According to Region of Origin and According to Educational Funding Monbusho (1983)

BEST COPY AVAILABLE

Table 2.

	U.S.A.	U.K.	W. Ger.	France	Japan
Number of Foreign Students	311,882	52,899	57,421	119,336	10,428
(Year)	(1980)	(1980)	(1979)	(1982)	(1983)
Foreign Students/ Total Students (%)	3.0	11.8	5.6	11.1	0.5

Source: Monbusho

students is the Republic of Korea. However, if we compare the number (1,557) of Korean Foreign student in Japan (1983, Monbusho) with those (11,360) in the U.S. (1982, UNESCO), it is evident that something is unusual. Korea is geographically, economically, linguistically and culturally very close to Japan but Japan hosts only about 1/8th the number of Korean foreign students of the U.S. In spite of new policies such as "Look East" and "Learn from Japan", students from other important nations of Asia; Malaysia, Indonesia, Singapore, Thailand and etc., are continuing to look West or to Australia or to other Eastern countries for foreign study. In Table 3 the main Asian sending countries and receiving countries can be seen.

Another characteristic is that the present percentage of students (Asian and other) coming on their own funds or supported by their governments is five times that of government sponsored students with non-government sponsored students on the increase.

The bulk of the students listed as non-Japanese government sponsored is taken up mostly by China (Taiwan and the People's Republic) and the Republic of Korea. The majority of most of the other Asian countries' students are Japanese government scholarship recipients. It is possible that unless more funding from private and public sources is given to non-scholarship students, numbers may not reach the projected 100,000.

Another point of interest is the type of university foreign students are attending. There is a strong tendency for graduate students to attend national universities and for undergraduate students to attend private universities (Table 1).

2) Why So Few Asian (and Other) Foreign Students in Japan?

A very useful set of seven contextual factors was proposed by Cummings (1984)

Table 3. Main Asian Sending Countries and Main Receiving Countries

UNESCO (1983)

No.	Country / Year	U.S.A. 1981	U.K. 1980	GER. 1980	USSR 1978	FRA. 1980	CAN. 1981	AUS. 1981	EGY. 1980	JAPN. 1980	CHI. 1981	IND. 1978	PAK. 1978	SING. 1980	TOTAL
1	China (Taiwan)	24,870	207	317	—	349	373	51	7	3,334	••••	1	13	1	30,127
2	Korea (Rep. of)	8,070	76	1,066	—	—	84	74	—	680	—	5	—	—	9,675
3	Thailand	6,730	241	290	—	—	79	400	21	240	12	451	76	10	9,965
4	Malaysia	9,420	8,554	43	—	—	4,870	8,197	354	143	—	1,124	42	1,432	35,693
5	Hong Kong	8,990	3,317	—	—	—	6,073	2,046	—	119	—	—	—	2	20,625
6	Indonesia	4,070	298	3,185	—	—	400	880	129	138	2	19	4	2	10,957
7	Philippines	3,410	52	43	—	—	97	139	18	98	4	8	1	—	4,294
8	Singapore	1,840	1,447	45	—	—	961	771	9	70	—	30	—	••••	5,366
9	Vietnam	4,940	8	621	3,989	1,332	17	111	—	104	—	1	—	—	12,403
10	Burma	100	27	5	—	—	8	21	—	12	—	21	—	1	224
11	India	11,250	672	655	—	307	844	265	17	45	3	••••	—	3	15,238
12	Sri Lanka	840	855	89	—	—	137	263	5	26	38	416	23	50	2,845
13	Bangladesh	1,610	209	121	—	—	178	146	22	53	18	127	—	3	2,776
14	Pakistan	3,550	580	267	—	—	168	84	126	17	36	6	••••	—	5,547
15	Iran	35,860	2,964	5,331	—	5,713	769	—	90	47	7	2,410	329	74	65,521
16	Iraq	1,600	1,721	233	—	607	101	—	393	3	2	138	29	—	7,363
17	Saudi Arabia	10,220	258	21	—	—	40	—	663	22	—	—	209	—	11,701
18	Japan	14,020	321	1,256	—	932	214	289	1	••••	367	38	3	—	18,066
	ASIAN TOTAL	180,458	26,712	24,756	21,627	20,161	16,296	14,067	13,241	5,229	765	7,241	1,900	1,590	406,604
	WORLD TOTAL	325,628	56,003	61,841	62,942	114,181	32,303	17,694	21,751	6,543	1,631	11,671	2,159	1,709	930,183
	% ASIAN	55.4	47.7	40.0	34.4	17.7	50.4	78.3	60.9	79.9	46.9	62.1	88.0	93.0	

Source: UNESCO, 1983

145

to help explain why so many Asian foreign students go to America. These are listed as follows:

1) The improving Asian-American political links
2) The increased volume of Asian-American economic exchange
3) The sharp increase in Asian immigration to the U.S.
4) Language and the increasing similarity in the structure and content of Asian and American educational systems
5) The absorptive capacity of American higher education
6) The quality of American higher education
7) The opportunities provided in American higher education to cover educational costs through part-time work.

While these were formulated for the American case they may help to explain increases or the absence of students for other countries as well. In this section, these will be discussed for the case of Japan.

Political Links

As to the first contextual factor Japan, while under careful scrutiny and often mistrusted by her Asian neighbors, has by and large begun to establish closer political ties with Asian nations. Partially due to a ruthless cultural imperialism practiced before and during the Second World War there are still lingering feelings of bitterness and prejudice against Japanese among Asians-notably in Korea, China and the Philippines which have likewise (and very unfortunately) been passed down to the youth of these countries. The Japanese government, however, is making sincere attempts to patch up old feuds and begin more productive interchange with many Asian nations. One gesture is the Ministry of Education scholarships, but these are not well distributed throughout Asia. The Japanese government unlike the U.S. government is notoriously poor at "PR" and has done little to provide much information about Japanese Universities to Asian nations. This is an important reason why young Asians have so little interest in Japanese Universities. A 1982 Survey by the RIHE on Foreign Graduate Students showed that 46 percent of the foreign graduate students on Monbusho National Scholarships had NO information about Japanese Universities before coming to Japan.

Economic Ties

The second factor, economic ties, is not easy to analyze for Japan since there

are so few students from most Asian Countries. A comparison of this sort could become a useless exercise in statistics. However, an important issue related to economics can be brought up. In Cummings' paper (1984) he states that the "presence of foreign businesses and products tends to highlight the value of overseas study as an asset in obtaining a high income job in the local or international offices of a foreign firm". Unfortunately the great majority of foreign students returning from Japan with hopes to join a branch office of a Japanese company are sorely disappointed. This problem has recently come under fire by returned foreign students in several Asian countries. This is a problem requiring much more cooperation from the Japanese business community.

Immigrant Ties

The third factor, immigrant ties is very complex in the case of Japan, especially for the Korean minority. It would appear that the substantial Korean resident population in Japan would have influence on the foreign student flow. The population of the Korean resident community in the U.S. has only recently surpassed that of Japan (in the 1970's), but the peculiar status of Japanese Korean residents and political problems tend to limit the number of relatives who come over from the penninsula for study. Some basis for the immigrant ties argument may exist but this argument is much weaker in the case of Japan than for the U.S.

It goes without saying that Japan has serious space problems and will not accept more than a handful of immigrants every year. Immigration is severely discouraged even in the case of refugees, so this factor can safely be ignored in the case of Japan.

Language and University Structure

The language and structure argument would require a whole book to even begin to explain but some main points are outlined below. Before approaching differences or problems in university structure as an argument it is important to state that in the case of student flow this applies only to students who are aware of the Japanese university structure and its problems, more than likely a rather small percentage.

The language argument is muddled by the existence of an English speaking Asia and an Asia that uses Chinese characters (Kanji). For Kanji-culture Asians the Japanese language is not nearly such an obstacle but for students from other countries Japanese is an extremely difficult language to master. Students from non-Kanji cultures must

spend at least two or three years to gain even a working knowledge of Japanese when many of them are much more interested in fields of study outside the realm of linguistics and literature. Furthermore, the Japanese language unlike the Yen is not internationally acceptable "currency" like English. Another problem is that far too much time is required in Japanese university courses for translation from English to Japanese. Successful students in most fields need a working knowledge of both languages.

To add to the problems there is still no universal standardized test to properly screen and evaluate foreign students' language ability. A TOEFL type Japanese test has been developed but is still on the drawing board and under fire from Japanese linguists.

Excellent Japanese language preparatory courses have been launched outside of Japan i.e., in China and Malaysia, and Korean universities especially in the private sector have excellent Japanese language courses, but the Japanese government and Japanese universities language programs are terribly few and understaffed, thus students don't get enough hours of instruction which is very much needed to help them get started with their academic work. A recent projection shows that 65,000 students will be needing Japanese language training by the year 2000. This will require a staff of about 10,000 trained language teachers.

In 1983 there were said to be an estimated 1000 Japanese instructors in universities or in preparatory institutes to prepare students for the university (the actual number may be considerably less). This situation should improve, however. In an article in the Asahi Shimbun Jan. 5th, 1985, a plan was outlined to train large numbers of Japanese instructors and establish new departments of Japanese language education at most Japanese national universities in the near future. The argument that foreign students should be trained in English at Japanese universities appears to have fallen on deaf ears. To the author's knowledge there are only three national universities attempting such a plan and only a few course offerings in English at these universities. The Private sector has performed better on this matter than the national universities with English offerings for foreign students at several of the more respected private universities. The newly established Kokusai Daigaku (International University) ICU and Sophia University offer many courses in English. An Alternate possibility is to establish "foreign student universities" where English is used as a medium.

Higher Educational Structure

The Japanese higher education structure has absorbed some American features

and is similar in many ways to that of Taiwan and Korea, however several major differences cause problems to foreign students and may act as deterrents. The most important of these is the PhD and advanced degree system. The nature of the Japanese "Hakase"(Doctor) is quite different from the PhD for many fields and getting a PhD within six years in fields outside of Medicine, Engineering and the Natural Sciences is virtually impossible. Even if one gets a Japanese PhD, regardless of its actual worth, it is not as highly evaluated as one from a European or American university, even a mediocre American or European university. Very few degree seeking graduate level foreign students after weighing the cost and benefit of study time abroad would choose to enter such a system. RIHE data shows that in Asia, outside of Korea and China, a Japanese advanced degree is not considered by graduate students to be so advantageous.(Table 4)

Table 4. Advantages of a Japanese Degree

(%)

	Total	Region								
		Taiwan & China	Korea	Oceania	South-east & South Asia	North America	Europe	Middle East	Latin America	Africa
Very advantageous	21.6	16.3	34.5	20.9	0.0	5.9	8.8	15.4	30.8	37.8
Advantageous	49.2	58.8	54.0	44.5	28.6	23.5	44.1	38.5	23.1	43.2
Not so advantageous	18.8	18.1	8.0	20.0	42.9	35.3	38.2	7.7	23.1	13.5
Don't know	10.4	6.9	3.4	14.5	28.6	35.3	8.8	38.5	23.1	5.4

Source: RIHE (1982)

In the case of many students from practically oriented developing Asian nations the very general curriculum and mass education style of the undergraduate courses and the overly theoretical, overly publication oriented and highly specialized nature of the graduate school is yet another deterrent to an informed potential foreign student. Many programs at Japanese universities can meet the needs of some foreign students but here again there is little available information about such programs.

There is also little foreign student policy at Japanese universities and a lack of coordination between persons responsible for helping foreign students. For more discussion on this problem please see Hicks (1984)[1].

The Absorptive Capacity of the Japanese Higher Education System

Although not as great as the U.S. the Japanese universities still have a surplus of places (12,000 in 1983) and with a decline in the university age population, which should begin in 1992, there should be adequate space for foreign students.

Quality

For several reasons, some mentioned in the Language and Structure section, the quality of Japanese higher education at the present time may be affecting the number of foreign students coming to Japan. The quality argument, however, is moot until a better definition of institutional quality is set down. Roughly speaking, however, at the present time, with the exception of notable programs in engineering, science and medical related fields, foreign students would more than likely get more benefit for their cost at universities in Europe and North America. If we try to define quality, a degree and the skills it represents is a good starting point for discussion but more evaluative studies on degree quality are necessary before we can continue on this point.

Cost

Japanese universities are not so prohibitively expensive but living costs are extraordinarily high. Just last year 1984 a law was passed giving foreign students the right to do part-time work, but the types of jobs available and the attitude of many Japanese towards competition from Asian foreign students do not make the prospects of getting part-time work seem very bright. Cost should make a pretty good case for discouraging non-scholarship students from studying in Japan.

3) How do Asian Students Evaluate Japanese Higher Education?

A system unprepared to meet the needs of foreign students will undoubtedly get its share of criticism. Some of this criticism has been shown in a survey by the RIHE on graduate foreign students.

As to satisfaction with instruction there seems to be a general overall satisfaction with the exception of students in the Pure Sciences with a 29 percent margin of dissatisfaction. (See Tables 5 and 6.)

A somewhat more severe test of a country's university system is whether or not students will recommend others to go abroad for study in that country. The same RIHE study showed that a large number, 37.7 percent, of Kanji-culture students would not

Table 5. Extent of Satisfaction with the Present Graduate School

(%)

	Total	Institution		Scholarship	
		National	Private	Students with scholarship	Students without scholarship
Very satisfied	20.6	21.1	15.5	23.1	17.5
Satisfied	53.3	53.6	56.3	54.2	52.4
Not so satisfied	17.1	15.5	25.4	14.4	20.3
Dissatisfied	4.7	4.9	2.8	5.3	3.8
Don't know	3.1	3.4	0.0	1.5	5.2
N.A.	1.2	1.5	0.0	1.5	0.9

Source: RIHE (1982)

Table 6. Satisfaction with Instruction

(%)

	Total	Field of Study									Region			
		Non-natural				Natural Sciences								
		Humanities	Social Sciences	Education	Non-natural Sciences	Pure Science	Engineering	Agriculture	Health	Natural Sciences	Taiwan Korea	South east & South Asia	Europe & North America	Others
1. Yes	68.0	69.6	66.7	73.7	69.1	64.5	74.8	63.2	65.5	69.2	73.7	68.2	58.6	58.7
2. No	18.9	23.2	18.5	13.2	19.1	29.0	11.5	22.1	15.5	16.6	15.0	15.5	31.0	20.6
3. D. K.	9.8	4.3	9.9	13.2	8.5	3.2	11.5	10.3	12.1	10.4	7.7	12.7	5.2	17.5

Source: RIHE (1982)

Table 7. Percentage of Foreign Students Who Would/Would Not Recommend Others to Study in Japan

(%)

	Kanji Culture	South & Southeast Asia	Europe & USA	Others
Recommend	45.7	47.2	56.9	64.7
Not recommend	37.7	25.5	13.8	10.3
Don't know	15.8	22.7	29.3	20.6
N.A.	0.8	4.5	0.0	4.4

Source: RIHE (1982)

Table 8. Responses to the Statement: "In General, Japanese Universities Have Reached to the International Academic Standards"

(%)

Response	Total	Field of Study						
		Humanities	Social Sciences	Pure Science	Engineering	Agriculture	Health	Education
1. Yes	63.5	47.8	53.1	74.2	72.5	60.3	79.3	52.6
2. No	13.7	23.2	22.2	9.7	6.9	13.2	5.2	18.4
3. D.K.	22.8	29.0	24.7	16.1	20.6	26.5	15.5	28.9

Source: RIHE (1982)

recommend their countrymen/women to study in Japan. The figure for Southeast and South Asia was 25.5 percent — would not recommend it. (See Table 7.) Many foreign students feel that Japanese universities have still not reached international academic standards. Table 8 shows social sciences and humanities to be less evaluated than engineering, for example.

It must be stated here that there are not enough large scale evaluative studies on study abroad in Japan to give an accurate portrayal of the present situation, Furthermore, most of the data presented here came from graduate student populations.

4) Conclusions and Points for Discussion

Six main points need be restated as a conclusion.

1. Japanese universities will have a great deal to offer Asian young people in the future, but at present there is much to be done before this situation can be actualized. Among these things are:
   a. Internationalizing a PhD degree system
   b. Establishing more practically oriented courses and allowing foreign students to learn at Japanese companies (where most of the practical education in Japan is being carried out)
   c. Improving Japanese language education.
2. The 100,000 projected foreign students may not come to Japan due to financial reasons, other reasons stated in this paper or for reasons not mentioned.
3. Foreign student growth should be kept stable until more preparations are made. Both the public and private sector should contribute here.
4. After preparations are made and quality and facilities are improved, Japanese

companies can help to balance the trade imbalance by allocating more funds for inviting Asian foreign students and technical trainees.

5. Universities and professors at Japanese universities can improve on their respective qualities, and teaching and research could be improved as it would serve to attract more and better foreign students.
6. Information and guidance in placement should be vastly improved. Foreign students should be placed at appropriate institutions for their needs, not simply mass-placed to increase arbitrary quotas.

Footnotes

1) "The Guidance of Foreign Graduate Students at Japanese Universities", THE CHANGING FUNCTIONS OF HIGHER EDUCATION, RIHE, 1984

« COMMENTS ON J. HICKS' PAPER »

Hirotoshi Yamasaki*

I would like to make three comments on Mr. Hicks' paper. But first I must point out the major problems of foreign students in Japan. These are language and the difficulty in getting an academic degree.

1) The Degree Problem

When a foreign student is unable to get a degree it is very difficult to get a promotion at work and indeed without a degree the returning student may be ridiculed upon return. However, it is important to make a distinction here; foreign students from certain applied science fields like agriculture and engineering can get PhD's from Japanese universities. The problem lies in fields without clear paradigms such as the humanities and the social sciences. The most important problem to consider is that in Japanese universities there is very little clear systematic guidance for students in the PhD course not only for foreign students but also for Japanese students as well. Japanese professors are beginning to work on this problem and it is more out in the open than before. I hope you will continue to complain about this system since it is not only too difficult for foreign students in the humanities and social sciences but also for us Japanese.

2) Low Visibility of Japanese Degrees

There is a problem with many countries not knowing the value of a Japanese degree and this is a problem of quantity. Not very many Japanese PhD's are granted and not much is known about Japanese degrees. This degree problem may be solved if the Japanese government continues to invest in international exchange programs. In spite of the recent financial slump the Japanese government continues to increase the budget for international programs and this should help the situation.

3) Final Conclusions

I would like to make some comments on your final conclusions. I generally agree with most of your conclusions, but in No. 5 especially, I must take issue when you

* Research Associate, R.I.H.E.

talk about a lack of quality of individual professors. The problem here is not quality per se but is the lack of guidance given to graduate students in writing dissertations, for example. This is a task for the whole educational system and applies not only to foreign students but also to Japanese students.

Finally, I agree with you when you say that there is a lack of information given to foreign students about Japanese universities and Japanese professors. I would hope the bureaucracy or other third-sector institutions here would provide more detailed information about courses available and more information about professors and what specific research they are doing.

UNESCO AND HIGHER EDUCATION IN THE ASIA-PACIFIC REGION*

Muhammed Selim**

Introduction

The higher education programme of Unesco and for that matter Unesco's role in higher education in the Asia-Pacific region can be better appreciated when seen in the perspective of Unesco's total programmes and how these programmes are formulated and carried out. Unesco's contributions lie in five broad areas which cover the most important aspects of our society namely: education, science, culture, social and human sciences and communication. The Unesco Headquarters in Paris has five substantive sectors, each comprising a number of Divisions, Departments and units to look after their respective programmes.

Unesco is now in its Second Medium Term Plan (1984—1989) which was approved by the General Conference of Unesco in its fourth extraordinary session held in 1982. Prior to that, extensive consultations took place with the Member States. Within the framework of this Medium Term Plan, the programmes of the first biennial period (1984—1985) were adopted by the Member States at the General Conference of Unesco in 1983. This will be followed by the second (1986—1987) and third (1988—1989) biennial periods to complete the six-year plan period. The major sources of funds are the regular budgets of Unesco (which come from the contributions of the Member States) and the extrabudgetary sources (contributions by other UN agencies, Member States and other organizations for specific programmes and projects).

Structurally the current programmes of Unesco are in some ways different from the past. The major difference is that in the past the programmes were distinctly clustered according to the five sectors, whereas at present, they have been built around fourteen major themes which are interdisciplinary in nature and ask for greater co-operation and co-ordination between and within the sectors. These themes are: (1) Reflection on world problems and future oriented studies, (2) Education for all, (3) Communication for service of man, (4) Formulation and application of education policies, (5) Education, training and society, (6) Sciences and their application to

---

* This paper is a personal contribution of the writer and does not necessarily represent the views of Unesco.

** Higher Education Specialist, Unesco Regional Office Bangkok, Thailand

development, (7) Information system and access to knowledge, (8) Principles, methods and strategies of action for development, (9) Science, technology and society, (10) Human environment and terrestrial and marine resources, (11) Culture and the future, (12) Elimination of prejudice, intolerance, racialism and aparthied, (13) Peace, international understanding, human rights and the rights of people, and (14) Status of woman.

Unesco, as one of the specialized agencies of the United Nations and being the largest organization in the UN system including UN itself, has the responsibility to serve its 160 Member States across the globe. Its programme activities are mainly carried out at three levels — Unesco Headquarters, regional/sub-regional offices and specific projects in Member States. In recent years, there is a trend towards decentralizing more activities to the regional offices as the Unesco Programmes are expanding.

For operational purposes, Unesco Member States are grouped into regions including the Asia-Pacific region which has 31 Member States.[1] They constitute a vast region spreading from Turkey in the west to Japan in the east and from Mongolia in the north to Australia and New Zealand in the south. These Member States are additionally served by one Regional Office for Education (Bangkok), two Regional Offices for Science and Technology (Delhi and Jakarta), one Regional Office for Book Development (Karachi), Regional Advisors for Social Science (Bangkok), for Culture (Bangkok), one Regional Office for the Pacific Island countries (Apia). An Assistant Director-General of Unesco, who also heads the Regional Office for Education in Bangkok acts as co-ordinator of these offices.

Higher Education Policy and Priority[2]

Unesco's current priority and policy in higher education are reflected in Programme V.5 -- higher education, training and research in the Second Medium Term Plan. It observes that in recent years higher education has unfolded many new opportunities. At the same time several of the major problems of education arise mainly at the higher level. The quantitative expansion of higher education, entailing a change of scale, has often obliged the responsible authorities to redefine its goals. In addition, the institutions of higher education are more and more often called upon to undertake new tasks and widen the scope of their activities to include new branches of learning and activity. Thus higher education has been playing an increasing part in the dissemination of culture and the organization of cultural activities.

Higher education establishments no longer confine themselves to provide an initial training. They now devote an increasingly high proportion of their activities to the retraining and further training of people engaged in professional activities, including university graduates. Increasing attention is being paid to the function of training for employment and to the function of service to the local or national community. While endeavoring to attain or maintain a level of excellence in fundamental research, certain institutions undertake much applied research directed towards solving practical problems.

Seen in the above context, Unesco's higher education programme basically aims to improve the contribution of higher education to the advancement of the society, by making its organization, content and methods better suited to its various functions and in particular to its new tasks. To this end Unesco endeavors to;

— encourage improvements in the operation of existing institutions, establishment of new types of institutions and programmes, adaptation of the content and expansion of the range of training and adoption of interdisciplinary approaches to research and training.

— support efforts to train managers in different countries at higher education level.

— encourage measures of international and regional co-operation.

There are also other programmes and sub-programmes particularly in science and social sciences which are concerned with higher education in numerous ways.

Biennium Programmes 1984—1985[3)]

Unesco's higher education programme as such is essentially set out into two sub-programmes. The first sub-programme concerns the development and improvement of higher education for the advancement of society. This sub-programme has been devised to promote the relevance of higher education through adaptation of curricula, courses and types of education and training and research activities to the needs of the society. Within this framework, Unesco during the 1984—1985 biennium seeks to define the goals of higher education and identify practical measures for bringing systems and institutions of higher education to line with those goals. It encourages participation of women in higher education at all levels and in all fields. Innovations aiming to raise the standard of higher education will continue to be encouraged as will the development of post-graduate studies, with a view to the optimum use of research and training potential.

The second sub-programme is concerned with research and training with a view to the development of education. The objective is to promote the development of research in the educational sciences and improve this research by combining it with activities for the training of various categories of educational personnel at different levels including higher education. The activities proposed for 1984—1985 aim above all to encourage research on higher education itself and on the training of personnel at that level.

The activities carried out under the two sub-programmes also seek to promote the exchange of information and experience and to develop national, regional and international co-operation. The activities planned for the 1984—1985 biennium aim to provide the means for action and investigation which will increase the relevance of higher education in relation to these objectives. The activities of the Regional Centers and Regional Offices are to be expanded in this regard. Special attention is to be given to the advisory services provided to Member States, on request, with a view to raising the standard of higher education.

In addition to the above, another sub-programme in science is directly related to university and post-graduate training. It basically aims at furthering the creation, strengthening and adaptation of university and post = graduate courses in the natural sciences so as to increase their efficiency, enhance training of qualified personnel and improve relationship between higher education institutions and various development sectors. Interdisciplinarity is encouraged withing each major training course. Similarly, a sub-programme in social and human sciences aims at the strengthening of national potential for university and post-graduate training. Both the programmes emphasize efforts aimed at increasing the participation of women in such activities.

Higher Education in Asia and the Pacific[4)]

Within its broad policy and priority, Unesco's role in Asia and the Pacific is shaped by the distinct needs of the region. Given the vastness of the region, its long history and the diversity of its socio-cultural context, wide variations are to be found in the systems of higher education. The industrialized countries have a long tradition of organized higher education. Other countries with long established cultural and educational values are attempting to adapt higher education to modernization. There are also some countries which are in the process of building their higher education systems from the ground up, some of them do not have any university structure at the third level. In all these countries, however, attempts are being made to broaden

Table 1. Higher Education: Number of Students Per 100,000 Inhabitants, 1970, 1975 and the Latest Year Available (LYA)

(28 countries)

Countries	1970	1975	LYA	Year
Developing Countries				
Afghanistan	63	87	117	1982
Bangladesh	172	201	269	1981
Bhutan	—	—	25	1980
Burma	166	180	362	1978
China	6	54	115	1982
Fiji	84	287	312	1981
India	526	746	664	1979
Indonesia	203	205	403	1982
Iran, Islamic Republic of	263	464	337	1982
Korea, Rep. of	631	842	2,392	1982
Lao People's Dem. Rep.	14	...	38	1980
Malaysia	133	264	467	1981
Mongolia	552	683	729	1979
Nepal	152	185	269	1980
Pakistan	175	169	185	1979
Papua New Guinea	43	212	165	1982
Philippines	1,736	1,788	2,642	1981
Samoa	80	165	410	1981
Singapore	665	1,005	1,253	1982
Sri Lanka	98	113	295	1981
Thailand	152	313	2,181	1982
Tonga	—	—	700	1981
Turkey	481	594	609	1982
Viet Nam	...	168	213	1980
Developed Countries				
Australia	1,432	2,016	2,280	1982
Japan	1,744	2,017	2,019	1982
New Zealand	1,504	2,155	2,472	1982
U.S.S.R.	1,895	1,916	1,969	1982

Note: The ratios shown in this table include estimates.
Source: Development of Education in Asia and the Pacific: A Statistical Review, Unesco, Paris, January 1985, p.50.

access to higher education to ensure equity and social justice.

The challenge for most of the countries in the region in the coming years will be to cope with the increasing number of students. With the increase in numbers the demographic and social composition of the campuses are diversifying. In several countries the rate of increase has outstripped the real resources. The expansion of the third level education in the region continued at 4.6 per cent annually during the period 1972—1982 adding 5.5 million students to the aggregate enrollment (Table 1). Even

though unemployment among educated young people in some countries is quite high, it has not stemmed the continuously rising demand for higher education. Studies show that individual and social returns on higher education are quite substantial. The probability of getting job is greater for higher education graduates than for secondary school leavers.

In the distribution of enrollments by fields of study, there is a distinct trend toward an increase in number of students choosing technical branches of study such as engineering and medicine. Because of the high cost involved, the supply of places in these preferred fields of study is limited and enrollments in the Arts, Humanities and Social Sciences have continued to expand (Table 2).

Table 2. Enrollments in Third Level Education by Field of Study[1]

(in thousands)

Field of Study	1970		1980		Index (1970 = 100)
	Enrollment	%	Enrollment	%	
Total all fields	6,633	100.0	11,918	100.0	180
Education	511	7.0	923	7.7	181
Humanities and Social Sciences	3,740	56.4	6,837	57.4	183
Natural Sciences and Engineering	1,794	27.1	3,005	25.2	167
Medical Sciences	297	4.5	596	5.0	200
Agricultural Sciences	170	2.6	276	2.3	162
Others	120	1.8	281	2.4	233

(1) Excluding China, Fiji, Mongolia, Viet Nam.
Source: Development of Education in Asia and the Pacific, Unesco, Paris, January 1985, P.19.

It appears that in most of the developing countries of the region, the expansion of higher education has been mainly in degree-awarding programmes. The increase in enrollments in non-degree, short cycle programmes has been relatively slow. The diversification of institutional structure at the third level has not generally been advancing as rapidly as might be considered desirable on economic grounds. A new and rapidly expanding phenomenon in the region is the use of distance education techniques in "open university" institutions to meet the demand for higher education, especially by employed youth and adults. In some countries private colleges and universities have a substantial role in meeting individual demand.

In the face of fast growth in enrollment and in the number of higher education

institutions, the central concern in most countries is the quality of higher education and its relevance to national development. Most higher education systems are under severe strain. Dropouts from courses, high rate of failure in examinations, the unusually long time taken by many students to finish a given course of study and growing unemployment and underemployment among the university graduates are only some of the manifestations of the problem. Curricula of higher education systems in the region have undergone changes in recent years, but innovations have been slow, unplanned and haphazard. In many countries the question of quality of higher education is being examined in terms of the supply and quality of teachers as well as methods involved in the teaching-learning process. A related issue is that of in-service staff development to enable all staff to keep abreast of new developments in their field. Several countries which used foreign languages as the medium of instruction now use their national languages in higher education institutions. The transition has not been without difficulty.

The problem of management of higher education is undoubtedly one of pressing urgency; indeed, in several countries in the region, one may refer to it without overstatement as a "crisis of management". Management of increasingly scarce resources is at the core of higher education administration, both at the institutional and systems levels. Higher education is highly resource intensive and in developing countries it faces severe competition from other levels of education as well as other sectors of the national economy. Internal efficiency has to be clearly defined in higher education. The use of human and physical resources in the costly endeavor of higher education has to be rational, economical and productive.

A basic function of the universities is the creation of new knowledge through research. University-based research in most of the developing countries in the region has not advanced as far nor contributed as much as was expected. Many factors have prevented the advance; for example, excessive emphasis on the undergraduate programme, heavy teaching load, lack of financial support, and paucity of libraries, laboratories and other facilities.

Regional Co-operative Programme in Higher Education for Development

Unesco's major programme in higher education in the Asia-Pacific region is emerging in the form of what is termed as the Regional Co-operative Programme in Higher Education for Development. This programme, now in operation for roughly two years, is intended to accomplish the following objectives:[5)]

1. Promote inter-country exchange of experiences and expertise in innovative developments in higher education in the participating countries, notably those aimed at linking higher education to social and economic development, broadening access to higher education through formal and non-formal structures and methods, and reorientating academic programmes, processes and services.
2. Contribute to the development and application of knowledge and techniques in the field of policy, planning and management of higher education at institutional and system levels for increasing the productivity, efficiency and relevance of higher education system.
3. Contribute through special research studies co-operatively carried out by the participating countries to knowledge and understanding of the problems and emerging roles of higher education in the social and economic context of the countries in the region.
4. Facilitate inter-country exchange of information and documentation on the systems of higher education and the problems and new developments in higher education.

Specific programme activities within the framework of the regional programme are carried out by three consortia of higher education institutions formed around three major clusters of activity namely; (a) innovation in higher education, (b) policy, planning and management in higher education, and (c) special research studies in higher education for development. Until now 15 Member States have nominated 70 institutions of higher education for the three consortia. Thus a consortium is a group of co-operating institutions sharing a common interest and pooling their intellectual resources for development and carrying out programme activities of mutual benefit. All the consortia have met and identified 15 projects they would like to undertake in the next few years.

It will, perhaps be appropriate to list by way of examples a few activities that were carried out or initiated in 1984. A regional workshop for key personnel in academic staff development in higher education was organized for two weeks at the University of New England, Australia. Ten countries participated in the workshop.

The national Academy of Higher Education in Pakistan organized a five-day national training workshop on interdisciplinary approach in higher education which was attended by 21 participants from universities and other organizations in Pakistan.

The National Institute of Educational Planning and Administration in

co-operation with the University Grants Commission, New Delhi, India organized a national training workshop on teaching methodologies in colleges. The week-long workshop drew 29 key level personnel from universities, colleges and other organizations of higher education in India.

The University of the Philippines, Quezon City hosted the research design meeting on the participation of institutions of higher education in development. The meeting, attended by six countries, produced a research proposal on the basis of which studies covering four different countries have been initiated.

The Sukhothai Thammathirat Open University brought out two issues of the newsletter on distance education entitled 'Never Too Far'. The newsletter is published twice a year.

Unesco Regional Office for Education published a directory of resource materials used in distance teaching by institutions of higher education in the Asia-Pacific region. The directory lists 34 institutions in six countries.

Regional Convention on the Recognition of Studies, Diplomas And Degrees in Higher Education in Asia and the Pacific

Unesco's higher education programmes in the Asia and Pacific region are wide ranging and some of them have far reaching consequences. One such significant development has been the adoption of the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific. The Convention was adopted in the International Conference of States that took place in Bangkok in 1983 under the auspices of Unesco. It was the fifth and final regional convention. Similar conventions in most other regions have already been ratified and these form a prelude to the adoption of a world convention.

Conventions of this kind are geared toward the increased mobility of staff and students in higher education and promoting adoption of standards and mutual recognition of studies and diplomas. Commenting on the importance these conventions at the inaugural session of the International Conference of States in Bangkok, the Director-General of Unesco stressed that, "the conventions gave expression to a genuine desire for understanding, co-operation and peace which existed in all regions of the world, transcending all differences and surmounting all difficulties."[6]

Association of Universities of Asia and the Pacific

The thrust of Unesco's programmes to promote co-operation among the

institutions of higher education in the region, which constitute a formidable intellectual resource, can also be seen in its initiative for the establishment of an association of universities of Asia and the Pacific. Significant progress toward that end has already been made including the Working Group Meeting in Manila in 1983.

The Working Group was convened by the Unesco National Commission of the Philippines with additional financial support from Unesco. Six countries participated in the meeting. The group agreed on the desirability and feasibility of the proposed association and drafted its constitution. The Unesco National Commission of the Philippines and the chairman of the Working Group has since then been following up the matter with the government authorities and the institutions of higher education in the region.

Other Programmes

Unesco Regional Offices for Science and Technology in Jakarta and New Delhi are also involved in many science programmes at the higher education level. These programmes mainly aim at improving the content and teaching methodologies and promoting co-operation and mutual assistance among the institutions of higher education in the region. The Asian Physics Education Network project established in 1981 is an example. The network covers a number of Unesco Member States in Asia and its structure is similar to that of the other two networks on natural products chemistry and microbiology. Similarly, projects are also carried out by the office of regional adviser of Social and Human Sciences which have direct relevance to higher education.

These offices organize a large number of training workshops, meetings, and study visits and provide support for studies which are complementary to and supportive of the programmes of the Education Sector in higher education.

Concluding Remarks

Unesco's involvement in higher education in Asia and the Pacific is deep and wide ranging. Activities carried out by Unesco in this field are far too many to list in this short paper. The paper has tried merely to describe the nature and scope of Unesco's role in higher education in the region with reference to some programme activities as examples.

Reference materials on Unesco's programmes and activities in higher education are available at Unesco Regional Office for Education in Asia and the Pacific, Bangkok.

References

1. *Second Medium Term Plan*, Unesco, Paris, 1983
2. *Approved Programme and Budget for 1984—1985*, Unesco, Paris, 1984
3. *Development of Education in Asia and the Pacific, (Working Document for Fifth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and the Pacific)*, Unesco, Paris, 1984
4. *Regional Co-operative Programme in Higher Education for Development* (Report of a Programme Development Meeting), Unesco Regional Office for Education in Asia and the Pacific, Bangkok, 1981
5. *Innovation in Higher Education* (Report of a Consortium Meeting on Innovation), Unesco Regional Office for Education in Asia and the Pacific, Bangkok, 1982
6. *Consortium on Policy, Planning and Management and on Special Studies in Higher Education* (Report of the Joint Meeting), Unesco Regional Office for Education in Asia and the Pacific, Bangkok, 1983
7. *International Conference of States with a View to Adoption of the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific, Final Report*, Unesco, Paris, 1984
8. *Backgrounder: Unesco*, Unesco, Paris
9. *Unesco in Asia and the Pacific* (Report of activities 1981—1983), Unesco Regional Office for Education in Asia and the Pacific, Bangkok, 1984
10. *Development of Education in Asia and the Pacific* (Reference Document for Fifth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and the Pacific), Unesco, Paris, 1985

Notes

1) Afghanistan, Australia, Bangladesh, Bhutan, Burma, China, Democratic Kampuchea, Dem. Peo. Rep. of Korea, Fiji, India, Indonesia, Iran, Japan, Lao PDR, Malaysia, Maldives, Mongolia, Nepal, New Zealand, Pakistan, Papua New Guinea, Philippines, Rep. of Korea, Samoa, Singapore, Soc. Rep. of Viet Nam, Sri Lanka, Thailand, Tonga, Turkey, USSR.
2) *Second Medium Term Plan (1984—1989)*, Unesco, Paris, 1983, pp.129—131.
3) *Approved Programme and Budget for 1984—1985*, Unesco, Paris, january 1984, pp.219—220, 239—240, 270—272.
4) *Development of Education in Asia and the Pacific* (Working Document for the Fifth Regional Conference of Ministers of Education and Those Responsible for Economic Planning in Asia and the Pacific), Unesco, Paris, January 1985, pp.69—75.
5) *Regional Co-operative Programme in Higher Education for Development* (Report of a Programme Development Meeting), Unesco Regional Office for Education in Asia and the Pacific, Bangkok, 1981, p.19.
6) *Final Report, International Conference of States with a View to Adoption of the Regional Convention on the Recognition of Studies, Diplomas and Degrees in Higher Education in Asia and the Pacific* (Bangkok, 12—16 December 1983), Unesco, p.5.

PREVIOUS VOLUMES OF INTERNATIONAL SEMINAR REPORTS

— Published by the Research Institute for Higher Education —

1. Perspectives for the Future System of Higher Education, 1977, 149p. (out of print)

2. Higher Education for the 1980's
   — Challenges and Responses — 1980, 189p. (out of print)

3. Innovation in Higher Education
   — Exchange of Experiences and Ideas in International Perspective — 1981, 179p. (out of print)

4. Comparative Approaches to Higher Education
   — Curriculum, Teaching and Innovations in an Age of Financial Difficulties — 1983, 248p.

5. The Changing Functions of Higher Education
   — Implications for Innovation — 1985, 219p.

RESEARCH INSTITUTE FOR HIGHER EDUCATION
HIROSHIMA UNIVERSITY

Higashi Senda-Machi 1-1-89
Naka-ku, Hiroshima JAPAN
730

〒 730-□□

1050

RECEIPT

To: Director
Research Institute for Higher Education

Received from the Research Institute for Higher Education, Hiroshima University as free copy(ies) of:

Title: Higher Education Expansion in Asia

Volume (Issues): No. (Vol.) 1985

No. of copies: 1

Institution:

Address:

Signature: